

COUNTY COUNCIL OF THE WEST RIDING  
OF YORKSHIRE.


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FORTY-SIXTH  
ANNUAL REPORT

OF THE  
County Medical Officer,  
FOR THE YEAR, 1934.

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*Printed by Order of the Public Health and Housing  
Committee, 16th September, 1935.*



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# WEST RIDING PUBLIC HEALTH AND HOUSING COMMITTEE.

## CHAIRMAN

County Alderman G. Probert

## VICE-CHAIRMAN

County Alderman D. A. Blackburn

## COUNTY ALDERMEN

Cartwright, W. B.	Siddall, J.
Dawson, Major J. M.	Tomlinson, T.
Dean, W.	Turner, Sir Ben
Lomas-Walker G. B.	Unwin, Miss H.
Newton, J.	

## COUNTY COUNCILLORS

Allan, J. T.	Hill, W.
Archer, Rev. F.	Hitchin, R.
Atkinson, Mrs. E. M. E.	Holmes, H. E.
Bailey, A. R.	Inglis, E. P.
Bevan, S. G.	Jackson, F.
Beverley, Mrs. H.	Jones, G. M.
Blackburn, A.	Kilner, A.
Blewitt, W. T.	Mellor, J. W.
Bradley, B.	Palmer, G. E.
Clough, W.	Parker, J.
Corfield, A.	Rhodes, Lt.-Col. H., M.C.
Crabtree, E.	Richardson, J.
Dawson, H. M.	Simpson, J. W.
Eddy, H.	Tack, A. W.
Flavell, A.	Waddilove, V.
Fletcher, A.	Wilkinson, J.
Fouchard, A.	Wood, E.
Goodall, N.	Wragg, Mrs. E.
Heald, Mrs. M.	York, Col. E., D.L.
Hibbert, W.	

TO THE CHAIRMAN AND MEMBERS OF THE PUBLIC HEALTH AND  
HOUSING COMMITTEE OF THE COUNTY COUNCIL OF THE  
WEST RIDING OF YORKSHIRE.

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Mr. Chairman, Ladies and Gentlemen,

I have the honour to present the Annual Report on the health conditions of the County during 1934. The minimum requirements of the report were prescribed by Circular 1,417 issued by the Ministry of Health. It is an "ordinary" report as distinct from one of the series of five-yearly survey reports, the next of which becomes due for the year 1935.

The vital statistics for the year 1934 reveal a reasonably satisfactory position. The birth and death rates and infantile mortality rate show an improvement not only in comparison with the rates in the County for the previous year, but also with those of England and Wales for the period under review (1934).

In regard to the infantile mortality rate (number of deaths of infants under one year per thousand births) the figure 58 represents the lowest rate ever recorded in the Administrative County. In contrast it will be remembered that it is only 25 years ago since the infantile mortality rate was 117, and 45 years since it was 156. This enormous reduction in child mortality is the dividend expressed in terms of human life which your Committee and predecessors in office have earned by their sound investments in the machinery of child welfare and by their unremitting labours in developing and modernising the organisation from year to year.

A further decline is to be noted in the incidence and death rate from all forms of tuberculosis. Here again it is interesting to look back over the last quarter of a century to the time (1912-1913) when Local Authorities assumed responsibility for the prevention and treatment of this disease, and it is seen that almost a 50% reduction in mortality has been effected.

These achievements in the sphere of preventive medicine should serve to give encouragement and to provide a stimulus to renewed efforts in fields yet unconquered in which the enemy continues insidiously to gain ground despite heavy onslaughts that have been made. I refer to the steadily increasing toll of life which is being exacted by the ravages of cancer, diseases of the heart and circulatory system.

In regard to the former, the considerable amount of experimental and research work carried out in the laboratories and hospitals of this and other countries is leading to a greater understanding of the nature of the disease, and large numbers of cancerous conditions, more particularly those in the earlier stages of disease are being cured.

This degree of success in the early treatment of a disease producing such a high mortality (1 in every 8 persons die from the disease) suggests an obvious precaution to be adopted, namely a periodic medical examination, say two or three times a year when a careful overhaul can be made and incipient disease detected before the inevitable repercussions have taken place in other parts of the system. This suggestion is by no means a new one but it is rarely acted upon.

It is an extraordinary fact that the owner of a car will expend endless time and money and put himself to considerable inconvenience in maintaining the car in perfect working order long before any serious defect has made itself apparent, but when it comes to his own body (or mind) upon the efficient functioning of which the very possession of a car depends, the question of a medical overhaul involving an hour or so each year and an outlay representing the price of one or two small spare parts for his car, is treated with scorn and contumely.



Once again I must refer to the subject of diphtheria. There were 3,062 cases of this disease notified in the Administrative County during the year, and of these 261 died. Since 1920 there have been approximately 20,000 cases in the County of whom nearly 2,000 have died. In previous reports I have drawn attention to this avoidable suffering and wastage of life. It is a matter for congratulation that during the year 1934, and early 1935, 45,000 children were immunised against this disease, but when it is remembered that there are nearly half a million children under the age of 15 in the Riding and that 25,000 newly born children are brought into the County each year it will be realised how vulnerable the child population of the County remains.

Until roughly 60% of school and pre-school children are immune to this condition, the possibility of epidemics of greater or less degree breaking out is constantly with us. The County Council has fully realised its responsibilities in this matter and is sparing no effort to induce parents to secure this protective inoculation for their children. Alternative schemes have been introduced whereby the inoculations can be carried out at clinics provided at Child Welfare Centres, at any school in the Administrative County, or at the surgery of a private doctor, and in each case immunisation is given free of charge. All school masters and school mistresses and all doctors in the County have been communicated with in order to enlist their influence and support in this attack upon the scourge, and I feel convinced that if the enthusiastic co-operation of parents, teaching and medical professions can be obtained diphtheria can be wiped out as surely as small-pox was removed by the introduction of vaccination.

The Maternal Mortality rate shows a slight reduction compared with that of the previous year. The rate was 5.53 for 1934 compared with 5.94 for 1933 and with 4.41 for England and Wales during 1934. The reduction is so slight as to warrant no comment. It is possible that the extensive measures to combat maternal mortality which your Committee has put into operation are now bearing fruit. I believe the West Riding scheme to be as complete in its detail as that of any other large provincial authority in the kingdom and is more complete than the majority, but however complete the machinery there are limits to its capacity and I reiterate that until the practice of abortion in certain parts of the County has been stamped out the efforts your Committee is making to reduce the number of deaths of women in childbirth will be in a large measure unavailing.

A steady increase in the demand for maternity hospital accommodation is taking place. A new maternity unit of twenty beds is about to be erected by the County Council at Wickersley in South Yorkshire to serve districts to the East and North-east of Rotherham and Sheffield, and another unit of similar size is contemplated in the Wortley area to serve the districts to the West and North-west of these two County Boroughs. Negotiations are proceeding with the Doncaster and Harrogate General Hospitals with the object of providing maternity blocks alongside these institutions. Obviously this method of providing maternity accommodation as an integral part of a general hospital is a sound policy and one conducing to the best service to the patient and to efficiency and economy in administration.

The development of the County Council's general hospital services has reached one stage further in the appointment of a Composite Committee comprising representatives of the Education, Mental Deficiency Acts, Public Assistance and Public Health Committees. A desire has been expressed by this Committee that as soon as possible the treatment of the sick shall be conducted under Acts other than Poor Law Acts, and to enable the appropriate Committees to develop their programmes the first step was to fix a line of demarcation between persons who should be regarded as "sick" and others. The Committee agreed to include within the "sick" category all persons requiring nursing attention, thus excluding those aged and infirm and "able-bodied" whose requirements are more in the nature of occasional domestic help than professional attention. This decision of the Committee has enabled the Public Assistance Committee to formulate its plan of development and so indicate which of the institutions possessed by the County Council or in which it has a right of user, are proposed to be retained in the future administration of the Public Assistance Committee. As a natural sequence the Public Health Committee is now in a position to face the problem of the treatment of the sick, to state which of the institutions proposed to be relinquished by the Public

Assistance Committee, can be utilised in the future Public Health programme for the treatment of the sick, and having ascertained these facts it will be possible to consult, as required by the Local Government Act, 1929 with the governing bodies of voluntary and other hospitals serving the area.

The Composite Committee has asked for a report to be presented upon a proposal to erect a general hospital in South Yorkshire to serve the Staincross, Rother Valley and Don Valley districts. The County Council possesses no general hospital in this part of the County, and the need for beds has been shown to be urgent.

As the result of pressure of work in the Department in connection with a number of new and important matters requiring immediate attention e.g., a Parliamentary Bill, Review of County Districts Enquiry, Accredited Milk Producers Scheme, Housing and Slum Clearance Enquiries, Enquiries into Water Supplies, etc., meetings of this special Committee on hospitals have been few in number. It is the intention of the Composite Committee, however, to make rapid headway in this matter at the earliest possible moment.

Closely linked up with the programme of hospital development is a proposal which has been before the Public Health Committee from time to time to provide an Analytical Laboratory as an extension to the Department. At the present time the part-time services of the County Analyst at Bradford are retained in connection with examinations of milk, water, and other articles of food; but in building up the future medical and hospital services of the County the scope of laboratory activities will need to be considerably widened so as to deal not only with matters connected with the adulteration of food but with a host of bio-chemical, medico-legal and other examinations which have become necessary as the result of progress in medical science during recent years. It will be necessary, therefore, when developing these services to have a central laboratory at Wakefield, with analytical, chemical and bio-chemical departments which will act as a clearing house for the smaller laboratories attached to the hospitals in the County; and in conjunction with the existing pathological and bacteriological laboratories will serve as a consultative centre for medical practitioners working in the Administrative Area.

During the year a survey of the medical services provided by the County Council was made by Dr. C. J. Donelan, Dr. J. E. Chapman, and Dr. Carol Sims of the Ministry of Health. The survey was carried out under Section 104 of the Local Government Act, 1929, the West Riding being one of the last authorities visited. Dr. Donelan was concerned more particularly with the general functions of the Departments and the Public Assistance Institutions. Dr. Chapman surveyed the Tuberculosis and Venereal Diseases schemes and Dr. Sims was engaged upon the Maternity and Child Welfare Services. A report upon the findings of the survey of the Ministry's Medical Officers has since been received by the County Council.

It is appropriate that some reference should be made to the Accredited Milk Producers Scheme although this came into operation so recently as the 1st May, 1935. At the time of writing (August 1935), 338 applications for Grade "A" licences have been received and of these, 320 premises have been inspected and reported upon. Certain complaints have been made either direct to the Department or through the press that the County Council's standards for constructional requirements of dairies and cowsheds are unreasonable and the restrictions much more severe than those imposed by other authorities. Reference to page 33 of this Report will give some idea of the requirements imposed by the West Riding County Council in its efforts to secure a safe milk supply. These conditions are not rigidly adhered to in every case but each application is considered individually on its general merits. The County Council of the West Riding is not the only authority which has been assailed in this way. Similar attacks have been made upon other County Councils who, like the West Riding, have observed their responsibilities under the Milk (Special Designations) Order, 1923, which empowered Local Authorities to issue Grade "A" licences. There are certain County Councils who apparently disregard the responsibilities given them by the 1923 Order and in these districts where no prescribed standards have been laid down and where little or no care has been demanded in the production and handling of milk it is known that applications to be placed upon the Accredited Producers Roll have been granted without due attention to the quality of the milk and to the interests of the consumer.

This lack of uniformity in administration among different authorities is obviously unfair to farmers in the West Riding and other Counties where care in the production of milk has been observed. It has meant that milk producers in those districts where administration has been lax have been able to obtain a 1d. per gallon more for an inferior quality of milk.

The attention of Officers of the Ministries of Health and Agriculture has been drawn to this serious anomaly and the County Councils' Association also has the matter under consideration. It is to be hoped that by their united efforts the necessary measures to secure uniformity in action by Local Authorities throughout the Country may be taken at an early date.

I have the honour to be,

Your obedient servant,

T. N. V. POTTS,

County Medical Officer.

County Hall, Wakefield,  
August, 1935.



## Staff

(JULY, 1935).

### County Medical Officer and School Medical Officer.

T. N. V. Potts, M.D., B.S., B.Hy., D.P.H.

### Administrative Assistant Medical Officers of Health.

P. L. Sutherland, M.B., Ch.B., D.Sc. (Pub. Health).	County Bacteriologist and Pathologist.
J. A. Fraser, M.B., Ch.B., D.P.H.	Senior Administrative Assistant.
R. Lawrence, M.D., Ch.B., D.P.H.	Chief Assistant School Medical Officer, and Child Welfare Medical Officer.
G. S. Johnston, M.D., Ch.B., D.P.H.	Chief Clinical Tuberculosis Officer.
J. L. G. Iredale, M.B., Ch.B., D.P.H.	Assistant Bacteriologist.

### Consultant Tuberculosis Officers.

H. E. Raeburn, M.D., M.B., B.S.	H. A. Crowther, M.A., M.R.C.S., L.R.C.P.
V. Ryan, M.D., Ch.B., D.P.H.	S. R. Wilson, M.D., Ch.B., D.P.H.

### Assistant Tuberculosis Officers.

G. A. Crowley, B.A., M.D., B.Ch., D.P.H.	T. W. Ruttledge, M.B., Ch.B., D.P.H.
J. E. Gething, B.A., M.B., Ch.B.	E. A. Wilson, M.D., M.R.C.S., L.R.C.P.
E. J. C. Groves, M.B., Ch.B.	S. P. Wilson, M.D., Ch.B., D.P.H.
A. Leitch, M.B., Ch.B., D.P.H.	J. Wood Wilson, M.D., Ch.B., D.P.H.
A. D. Rankin, M.B., Ch.B., D.P.H.	

### Sanatorium Medical Staffs.

G. S. Johnston, M.D., Ch.B., D.P.H.	( <i>Chief Clinical Tuberculosis Officer</i> ), Medical Superintendent, Cardigan Sanatorium.
H. E. Raeburn, M.D., M.B., B.S.	Medical Superintendent, Middleton Sanatorium.
C. J. Martin, O.B.E., B.A., M.B., B.Ch.	Senior Assistant M.O. do. do.
C. Poniedel, M.B., Ch.B.	Second Assistant M.O. do. do.
Vacant.	Third Assistant M.O. do. do.
V. Ryan, M.D., Ch.B., D.P.H.	Medical Superintendent, Crookhill Hall Receiving Home.
H. Bird Sproat, M.D., Ch.B.	Medical Superintendent, Mitchell Memorial Home, Rawdon.
M. S. Sharp, M.B., Ch.B.	Medical Superintendent, Eldwick Sanatorium.

### Sanatorium Nursing Staff.

Middleton Sanatorium	Matron, J. Pegg.
	Nursing Staff, 39.
Cardigan Sanatorium	Matron, E. Marvin.
	Nursing Staff, 6.
Crookhill Hall Receiving Home	Matron, M. A. Toogood.
	Nursing Staff, 6.
Eldwick Sanatorium	Matron, Martha Heslop.
	Nursing Staff, 5.
Mitchell Memorial Home	Matron, A. Burnett.
	Nursing Staff, 3.

### Venereal Diseases Officers.

There are 18 part-time Medical Officers centres; see page 24 for list of centres.

### School Oculists.

C. S. Stoddart, M.B., Ch.B.  
H. W. Murphy, M.B., Ch.B., D.P.H.  
C. G. K. Sharp, M.D., Ch.B. (Part-time).

### School Medical Inspectors.

N. Allan, M.B., Ch.B.	S. Lindsay, M.B., Ch.B.
J. M. Anderson, M.R.C.S., L.R.C.P.	J. M. Macmillan, M.B., Ch.B., D.P.H.
R. B. Becker, M.D., Ch.B., D.P.H.	G. M. Mayhall, M.R.C.S., L.R.C.P.
J. W. Cairns, M.D., Ch.B., D.P.H.	B. M. Newlands, M.B., Ch.B., D.P.H.
J. Coupland, M.B., B.S., D.P.H.	M. E. Peaker, M.R.C.S., L.R.C.P.
R. L. H. Davy, M.B., B.S., D.P.H.	A. Rennie, M.B., Ch.B.
G. P. Holderness, M.B., Ch.B., D.P.H.	D. C. Rice, M.B., Ch.B.
J. V. Kirkwood, M.B., Ch.B., D.P.H.	J. J. Smith, M.B., Ch.B., D.P.H.

**Senior Dental Officer.**

B. R. Townend, L.D.S.

**School Dentists.**

O. A. Long, L.D.S.	B. Sleight, B.D.S.
F. W. Buzza, L.D.S.	P. D. Copeland, B.D.S.
J. M. Macdonald, L.D.S.	G. O. Wood, L.D.S.
J. Mackay, L.D.S.	H. F. Jones, L.D.S.
K. Batten, L.D.S.	D. M. Phillips, D.D.S.
J. R. Wishart, L.D.S.	R. E. Morgan, L.D.S.
R. Sclare, L.D.S.	A. M. Moorhead, L.D.S.
J. Fletcher, L.D.S.	S. E. Clarke, L.D.S.
C. Baines, L.D.S.	E. Thornton, L.D.S.
J. Jackson, L.D.S.	M. E. Thom, L.D.S.
G. Kilvington, L.D.S.	

**County Analyst.**

F. W. Richardson, F.I.C., F.C.S.

**Consultant Obstetricians and Gynæcologists.**

12 Consultants.

**Child Welfare Centre and Ante Natal Medical Officers.**

Whole-time Medical Officers of Health	...	...	...	...	...	...	3
School Medical Inspectors	...	...	...	...	...	...	10
Part-time Medical Practitioners in general practice	...	...	...	...	...	...	59
Part-time Medical Women in general practice	...	...	...	...	...	...	17
Part-time Medical Women not in general practice	...	...	...	...	...	...	8

**School Nurses and Health Visitors, etc.**

Miss A. Brooke—Inspectress of Nurses and Midwives.  
 Miss A. E. Williams—Inspectress of Nurses and Midwives.  
 112 Child Welfare Nurses.  
 6 School Nurses.  
 22 Dental Nurses and Attendants.  
 22 Tuberculosis Nurses.  
 63 Part-time Child Welfare Nurses.

**Technical Staff.****CHIEF COUNTY SANITARY INSPECTOR :**

A. Brook.

**COUNTY SANITARY INSPECTORS :**

L. Butterworth. H. Tayler.

**Laboratory Staff :****CHIEF LABORATORY ASSISTANT :**

J. W. Gooderidge.

**SENIOR LABORATORY ASSISTANTS :**

I. W. Harris, J. B. Marshall.

2 Junior Assistants, 5 Attendants.

**COUNTY RADIOGRAPHER :**

Miss A. M. Byass, B.Sc., M.S.R.

**FOOD AND DRUGS SAMPLING OFFICERS :**

(Also act as Inspectors of Weights and Measures)

1 Chief Inspector, 9 Sampling Officers.

**Clerical Staff.****CHIEF CLERK :**

J. C. Bennett.

**SECTIONAL SENIOR CLERKS :**

R. L. Rea.	J. W. Beaumont.
W. A. Ryder.	H. V. Stott.
J. H. Gloyne.	J. W. Bray.
B. E. Allenby.	A. B. Harrison.

19 Clerks, 12 Typists.

**Medical Officers of Health.**

There are 13 whole-time and 93 part-time Medical Officers of Health; for list see Table folded in at page 16, headed "Births, Deaths, Annual Rates, etc."

## District Medical Officers (Public Assistance) and Public Vaccinators.

Name	Qualifications.	District	Area (acres)	Population (approx.)
<i>No. 1.—Ewecross Area.</i>				
J. T. Bleasdel	M.R.C.S., L.R.C.P.	Gisburn	30302	2974
T. G. S. Harkness	L.R.C.P., L.R.C.S.	Slaidburn	51360	2475
C. A. Allan	M.B., Ch.B.	Great Mitton	1727	181
T. W. Rothwell	M.B., Ch.B.	Dent	20895	925
B. S. Hyslop	M.B., Ch.B.	Sedbergh Garsdale	31779	2644
G. J. Marks	M.B., Ch.B.	Horton and Settle	35775	5025
A. J. Troughton	L.R.C.P., L.R.C.S., L.R.F.P.S.	Ingleton	26548	3033
T. Lovett	M.B., Ch.B.	Bentham	7718	2452
E. H. Marsh	M.R.C.S., L.R.C.P.	Clapham	25345	1249
H. Wales	M.B., B.Ch.	Long Preston	16295	2095
K. C. Crosbie	M.B., Ch.B.	Kirkby Malham	22328	608
		Arnccliffe	17998	284
<i>No. 2.—Staincliffe Area.</i>				
C. Clyne	M.B., Ch.B.	Kildwick	11327	6586
W. L. Crabtree	L.S.A., L.M.S.S.A.	Addingham	20785	2761
K. C. Crosbie	M.B., Ch.B.	Grassington and Kettlewell	60502	3245
N. A. MacLeod	M.D., M.B., Ch.B.	Skipton	21978	15471
A. M. Niven	M.B., Ch.B.	Thornton	10002	6667
J. W. Pickard	M.B., Ch.B.	Barnoldswick	6572	12131
M. Purcell	M.B., Ch.B., B.A.O.	Silsden	7101	4881
H. Wales	M.B., Ch.B.	Gargrave	20994	1941
<i>No. 3.—Claro Area.</i>				
†C. A. Flintoff	M.R.C.S., L.R.C.P.	Pateley Bridge	49939	5820
E. G. Campbell	M.B., Ch.B., D.P.H.	Birstwith	25132	1245
P. A. Steven	M.B., Ch.B.	Ripon	18394	10736
S. Hey	M.R.C.S., L.R.C.P.	Sharow	7391	887
R. G. M. Harvey	L.R.C.P.I. & L.M., L.R.C.S.I.	Kirkby Malzeard	25817	2162
S. Foskett	M.D., B.S.	Harrogate	10795	38935
†D. F. Dobson	M.B., B.S., D.P.H.	Killinghall	15624	3085
†W. J. Forbes	M.B., Ch.B., B.A.O.	Knaresbro'	12141	8186
S. C. Wilkinson	M.B., Ch.B., L.S.A.	Knaresbro'	2688	4318
J. S. Dudgeon	M.D., B.Ch., B.A.O., D.P.H.	Starbeck	8861	7024
R. C. Davison	M.B., B.S.	Acomb	16981	2553
†J. M. Benson	M.B., Ch.B.	Green Hammerton	10201	1298
F. P. Rust	M.B., B.S., L.R.C.P., L.R.C.S.	Gt. Ouseburn	9926	2401
		Boro'bridge		
<i>No. 4.—Barkston Ash Area.</i>				
T. H. Barton	M.B., B.S.	Bishopthorpe	6411	2933
C. H. Sykes	L.R.C.P., L.R.C.S., L.R.F.P.S.	Aberford	17315	9557
†C. C. Hargreaves	M.B., Ch.B., D.P.H.	Kippax	10167	13503
Wm. Murphy	M.B., Ch.B., M.R.C.S., L.R.C.P.	Sherburn	22009	5254
J. P. Scatchard	M.B., B.S., M.R.C.S., L.R.C.P.	Ryther	22902	5806
R. W. Lee	M.B., Ch.B.	Tadcaster	11100	4384
O. F. Barr	M.B., Ch.B.	Boston Spa	19233	3365
O. D. Beetham	M.B., Ch.B.	Harewood	7058	2311
†J. A. Hargreaves	M.B., C.M.	Kirkby Overblow	27247	6388
		Thorner		
		Tockwith		
		Wetherby		
<i>No. 5.—Skrack Area.</i>				
D. W. E. Burridge	M.B., Ch.B.	Horsforth	5758	17014
†A. J. I. Muschamp	M.B., Ch.B.	Yeadon	4568	13429
†G. E. Macvie	M.D., Ch.B.	Baildon	5558	9059
†E. G. Firth	M.R.C.S., L.R.C.P.	Ilkley	11646	10472
T. Browne-Hearder	M.B., C.M.	Otley	37111	22349
W. H. Galloway	M.R.C.S., L.R.C.P.			
<i>No. 6.—Worth Valley Area.</i>				
†H. C. Ling	M.R.C.S., L.R.C.P. & L.M.	North Keighley	11663	43666
†J. E. H. Scott	M.B., Ch.B.	South Keighley		
*F. Villy	M.D.			
J. M. Crocker	M.R.C.S., L.R.C.P.	Bingley	9522	17370
J. E. Baird	M.B., Ch.B., B.A.O.	Cullingworth	1215	1500
C. Clyne	M.B., Ch.B.	Haworth	9991	11500
G. Marquis	M.B., Ch.B.	Sutton	4414	4641
		Wilsden	2638	3000
<i>No. 7.—East Morley Area.</i>				
†E. T. Hyland	M.B., B.Ch., B.A.O.	Pudsey	2399	14762
H. D. Merrington	M.B., Ch.B.	Drighlington	1135	4064
A. L. Mitchell	M.B., Ch.B.	Hunsworth (part of)	1381	879
J. A. Hope	M.B., C.M.	Hunsworth (part of)	—	439
*O. D. Ballinger	B.M., B.Ch.	Shipley	2182	30243
†H. Gibson	M.R.C.S., L.R.C.P.			
A. H. Stewart	M.D., M.B., C.M.	Denholme	2536	2662
N. A. A. Hughes	M.R.C.S., L.R.C.P.	Calverley	2106	3655
†T. H. Elmer	M.B., Ch.B.	Farsley	821	6158
<i>No. 8.—Calder Area.</i>				
††W. R. Thompson	L.R.C.P., L.R.C.S., L.R.F.P.S.	Shelf	1303	2600
*J. J. Murphy	M.B., B.Ch., B.A.O.			

\* Public Vaccinator only.

† District Medical Officer only.

†† Medical Officer of Health (part time)



Name.	Qualifications.	District.	Area (Acres.)	Population (approx.)
<i>No. 8.—Calder Area (contd.).</i>				
†A. J. W. Stephen ...	M.B., Ch.B., D.P.H. ...	Ripponden ...	13240	5447
†H. W. Morck ...	M.R.C.S., L.R.C.P. ...	Sowerby and	4140	15807
V. C. Meyer ...	M.B., Ch.B. ...	Sowerby Bridge		
C. S. Ogilvy ...	L.R.C.P., L.R.C.S., L.R.F.P.S. ...	Luddenden Foot ...	2948	4763
†W. Skeels ...	M.R.C.S., L.R.C.P. ...	Brighouse ...	9749	32159
†J. H. J. V. Coats ...	M.B., B.Ch. ...	Hipperholme		
C. M. Stallard ...	M.D., Ch.B. ...	Rastrick ...	3431	15048
A. G. Gamble ...	L.M.S.S.A. ...	Elland ...		
†N. C. Beaumont ...	M.R.C.S., L.R.C.P. ...	Stainland ...	2320	4246
G. C. Sharp ...	M.B., Ch.B. ...	Queensbury ...	1492	5763
H. Thorp ...	M.B., Ch.B., D.P.H. ...	Todmorden ...	12770	22223
†F. J. Dowdall ...	M.B., B.Ch. B.A.O. ...	Hebden Bridge ...	20977	11197
S. T. Henderson ...	M.B., Ch.B. ...	Mytholmroyd ...	6608	4467
<i>No. 9.—Spen Valley Area.</i>				
H. Keighley ...	M.R.C.S., L.R.C.P. ...	Batley ...	3026	33200
†A. Dick ...	M.B., Ch.B., D.P.H. ...	Birstall ...	1435	8578
A. L. Mitchell ...	M.B., Ch.B. ...	Cleckheaton ...	1756	12500
H. D. Merrington ...	M.B., Ch.B. ...	Gildersome ...	992	3041
E. M. Whitehead ...	M.B., Ch.B. ...	Gomersal ...	2024	6586
W. A. Mair ...	M.B., Ch.B., F.R.C.S.E. ...	Heckmondwike ...	696	8991
R. M. Beatty ...	M.B., Ch.B. ...	Liversedge ...	2136	14692
J. E. H. West ...	M.B., Ch.B. ...	Mirfield ...	3394	12099
*†W. S. Sykes ...	M.B., B.Ch., D.P.H. ...	Morley ...	3385	23397
†W. T. McCutcheon ...	M.B., Ch.B. ...			
†W. L. René Wood ...	M.R.C.S., L.R.C.P. ...	Ossett ...	3333	14838
<i>No. 10.—Lower Agbrigg Area.</i>				
T. Stephens ...	B.Sc. M.R.C.S., L.R.C.P. ...	{ Kirkhamgate Ardsley, E. and W. Thorpe ... }	5471	11605
O. V. Burrows ...	M.B., B.Ch. ...	Crigglestone ...	5261	4949
††D. Bell ...	M.B., Ch.B., D.P.H. ...	Emley ...	8076	6516
C. H. Smith ...	M.B., Ch.B. ...	Flockton ...		
J. N. U. Russell ...	M.B., B.Ch., B.A.O. ...	Horbury ...	1280	7791
†M. Melvin ...	M.B., Ch.B. ...	Lofthouse and Stanley	6239	19839
J. D. Bottomley ...	M.B., Ch.B. ...			
†F. J. G. Tocher ...	M.B., Ch.B. ...	Walton ...	2662	1521
D. Downie ...	M.B., Ch.B. ...	Altofts ...	3066	20664
††H. Scholefield ...	M.B., Ch.B. ...	Normanton ...		
N. S. Twist ...	M.B., Ch.B. ...	Sharlston and	4612	7014
†J. G. Munro ...	M.B., Ch.B. ...	Crofton		
*T. E. Lister ...	M.B., Ch.B. ...	Oulton ...	1178	4290
C. H. Seville ...	M.B., Ch.B. ...	Rothwell ...	3500	9300
†H. Stevenson ...	M.B., C.M. ...			
<i>No. 11.—Osgoldcross Area.</i>				
G. Burnett ...	M.B., Ch.B., F.R.C.S. ...	Pontefract ...	9939	20612
†J. Kehelly ...	M.B. B.Ch., B.A.O. ...	Knottingley ...	14411	9015
F. G. Creaser ...	M.B., Ch.B. ...	Hensall ...	5678	880
T. McCarthy ...	M.B., Ch.B. ...	Ferry Fryston ...	12423	10769
J. J. W. Campbell ...	L.R.C.P., L.R.C.S., L.R.F.P.S. ...	Castleford ...	3728	36582
†W. Steven ...	M.B., C.M. ...	Featherstone ...	4431	14952
E. W. L. White ...	M.B., Ch.B. ...	Methley ...	3493	4606
†*M. B. Taylor ...	M.R.C.S., L.R.C.P. ...	Hemsworth ...	4163	13001
T. C. A. Sweetnam ...	M.D., B.Ch. ...			
W. L. Gardner ...	M.B., B.S. ...	Ackworth ...	8036	5523
J. Malloch ...	M.B., Ch.B. ...	Smeaton ...	5504	866
E. J. H. Sullivan ...	M.D., M.Ch., L.M. ...	Sth. Kirkby ...	7019	22334
S. Hodgkinson ...	M.B., Ch.B., D.T.M. ...	Ryhill ...	4297	6290
†J. L. Elliott ...	L.S.A., L.M.S.S.A. ...	Brierley ...	3413	8378
†J. W. Whitworth ...	M.B., Ch.B. ...	Houghton ...	2318	3276
<i>No. 12.—Goole and Selby Area.</i>				
†A. M. Erskine ...	M.D., B.Ch., D.P.H. ...	Goole ...	10123	21747
F. G. Creaser ...	M.B., Ch.B. ...	{ Snaith ... Carlton ... }	13553	4681
W. Eardley ...	M.B., B.Ch. ...	Swinefleet ...	11902	1999
J. C. T. Crowden ...	M.B., Ch.B. ...	Adlingfleet ...	8942	2207
O. L. Scarborough ...	M.R.C.S., L.R.C.P. ...	Selby and Cawood	5425	391
			26354	14007
<i>No. 13.—Don Valley Area.</i>				
†J. M. Hain ...	M.B., Ch.B. ...	Doncaster West ... (Arksey, etc.) ... }	7983	18123
†W. L. Walker ...	M.B., Ch.B. ...			
*B. Lyons ...	M.D., B.Ch., D.P.H. ...			
H. F. Renton ...	M.D., B.S., M.R.C.S. ...	Armthorpe ...	15190	11977
J. Malloch ...	M.B., Ch.B. ...	Askern ...	18035	9530
W. F. Ward ...	L.R.C.P., M.R.C.S. ...	Bawtry ...	7939	11947
†G. B. Kelly ...	M.B., Ch.B., B.A.O. ...	Bolton-on-Dearne ...	2325	14242
*J. K. T. Mills ...	M.B., Ch.B. ...			
†F. J. Boyle ...	M.B., B.Ch., B.A.O. ...	Thurnscoe ...	1254	10540
W. J. Maclure ...	M.B., Ch.B. ...	Conisbrough ...	13117	28462
R. B. Radcliffe ...	M.B., Ch.B. ...	Hooton Pagnell ...	11915	1483
D. Malloch ...	M.B., Ch.B. ...	Adwick-le-Street ...	3605	20257

\*Public Vaccinator only.

†District Medical Officer only.

‡Medical Officer of Health (part time).



Name	Qualifications.	District.	Area. (acres)	Population (approx.)
No. 13.—Don Valley Area—(contd.).				
†J. J. Huey ...	L.S.A., L.M.S.S.A. ...	Mexborough ...	4511	17184
†A. C. Lindsay ...	M.B., Ch.B. ...	Tickhill ...	12768	3137
C. D. Walker ...	M.B., Ch.B. ...	Hatfield ...	16188	7486
R. M. L. Anderson ...	M.B., Ch.B. ...	Stainforth ...	8806	9061
*†J. M. Taylor ...	M.B., Ch.B., D.P.H. ...	Thorne ...	13425	14607
†W. Henry ...	M.B., Ch.B. ...			
No. 14.—Staincross Area.				
J. Leishman ...	M.D., Ch.B. ...	Dodworth ...	5075	8197
†H. R. L. Allott ...	L.M.S.S.A. ...	Hoyland ...	1961	11860
H. N. Ritchie ...	L.R.C.P.I., L.M., L.R.C.S.I., L.M.	Hoyland Common ...	2999	10695
†H. A. L. Banham ...	L.R.C.P., L.R.C.S., ...	Worsborough ...	3288	7650
†R. Millar ...	M.B., Ch.B., D.P.H. ...	Darton ...	3968	8783
†J. C. Pickup ...	M.B., Ch.B., D.P.H. ...	Wombwell ...	3567	18117
†H. B. Pare ...	M.B., Ch.B. ...	Royston ...	5602	9823
†J. L. Elliott ...	L.S.A., L.M.S.S.A. ...	Cudworth ...	1746	9380
†J. W. Whitworth ...	M.B., Ch.B. ...	Darfield ...	2881	5411
J. Smail ...	M.B., Ch.B. ...	Grenoside ...	3537	6468
H. Sands ...	M.B., Ch.B. B.A.O. ...	Ecclesfield ...	2800	8950
J. A. R. Thompson ...	M.D., Ch.B. D.P.H. ...	Westnall ...	10573	4328
N. McPhail ...	M.B., Ch.B. ...	Bradfield ...	21727	4578
T. A. H. Smith ...	M.B., Ch.B. ...	Southey ...	700	600
A. E. Goldie ...	M.B., Ch.B. ...	Stocksbridge ...	5938	10235
†T. H. Easton ...	M.D., Ch.B. ...	Wortley ...	7839	2312
A. A. Masser ...	M.B., Ch.B. ...	Penistone ...	17182	7176
†R. N. Farrer ...	M.R.C.S., L.R.C.P. ...	Clayton West ...	6927	4298
F. L. Whincup ...	M.B., Ch.B. ...	Cawthorne ...	8778	4815
No. 15.—Upper Agbrigg Area.				
†J. A. Stephens ...	M.R.C.S., L.R.C.P. ...	Kirkburton ...	6987	8424
†D. Bell ...	M.B., Ch.B., D.P.H. ...	Skelmanthorpe ...	4158	6685
†M. M. Dey ...	M.B., Ch.B. ...	Shepley ...	7936	7645
W. D. Galloway ...	M.R.C.S., L.R.C.P. ...	Holmfirth ...	8993	5246
*E. Trotter ...	M.B., Ch.B. ...	Holmfirth ...	4641	7084
††T. S. Davy ...	M.B., Ch.B. ...			
†W. H. Smailes ...	M.D., Ch.B., D.P.H. ...	Honley ...	1977	4745
P. MacGirr ...	M.B., Ch.B. ...	Meltham ...	6858	7910
R. N. Kirk ...	M.B., Ch.B. ...	Slaitwaite ...	5439	9252
S. Hall ...	M.B., Ch.B., B.A.O. ...	Golcar ...	2456	15824
G. R. Aspinwall ...	M.R.C.S., L.R.C.P. ...	Marsden ...	8633	5720
S. Prior ...	M.B., C.M. ...	Kirkheaton ...	1674	2610
††H. Ramsden ...	M.D., Ch.B., D.P.H. ...	The whole of the area covered by the former Saddleworth Union	18485	17410
†A. S. Bruzard ...	M.R.C.S., L.R.C.P. ...			
J. Loftus ...	M.B., Ch.B. ...			
J. G. Oliver ...	M.B., Ch.B. ...			
†P. B. Wood ...	M.B., Ch.B. ...			
No. 16.—Rother Valley Area.				
H. M. Mills ...	M.B., Ch.B. ...	Wentworth ...	2328	1729
C. J. H. Aitken ...	M.D., C.M. ...	Swinton ...	1730	13820
†T. Crowley ...	L.R.C.P., L.R.C.S. ...	Wath-on-D. ...	4954	17089
D. P. K. Jockel ...	M.B., Ch.B. ...	Rawmarsh ...	2550	18570
G. H. Sedgwick ...	M.R.C.S., L.R.C.P. ...	Greasboro' ...	2413	3599
†W. L. Dibb ...	M.B., Ch.B., D.P.H. ...	Dalton ...	4351	9249
G. S. L. Kemp ...	M.R.C.S., L.R.C.P. ...	Maltby ...	9259	14929
†J. S. Shirlaw ...	M.B., Ch.B. ...	Thurcroft ...	8945	10245
†T. B. Johnstone ...	L.R.C.P., L.R.C.S. ...	Kiveton Park ...	20070	17034
†K. Mackenzie ...	M.B., Ch.B. ...			
J. N. Clark ...	L.R.C.P., L.R.C.S. ...	Brinsworth and Catcliffe ...	6904	9151
R. G. Selby ...	M.B., C.M. ...			

\* Public Vaccinator only.

† District Medical Officer only.

‡ Medical Officer of Health (part time).

## List of Vaccination Officers Serving Administrative Area.

Name of Officer.	District Served	Area in Acres.	Population.
<i>Area No. 1—Ewecross.</i>		(approx.)	(approx.)
W. Roberts ... ..	Bowland Rural ... ..	73833	4271
Mrs. M. A. Hargreaves ... ..	Bashall Eaves ... ..	7838	1178
J. Peters ... ..	Mitton ... ..	1727	181
G. Kayley ... ..	Garsdale ... ..	11068	410
W. Batty ... ..	Dent and Sedbergh ... ..	41606	3159
W. Slinger ... ..	Bentham ... ..	59611	6734
C. Parker ... ..	Settle and Long Preston ... ..	92396	8012
<i>Area No. 2—Staincliffe.</i>			
G. J. Harker ... ..	Grassington ... ..	27355	2555
S. H. Day ... ..	Kettlewell ... ..	33147	690
G. D. Hunt ... ..	Gargrave ... ..	17757	1819
J. E. Atack ... ..	Addingham ... ..	20785	2761
D. Slater ... ..	Kildwick ... ..	20379	12058
Do. ... ..	Skipton ... ..	19112	14765
Do. ... ..	Barnoldswick ... ..	20726	19035
<i>Area No. 3.—Claro.</i>			
T. C. Crawhall ... ..	Great Ouseburn ... ..	45969	13276
J. Clark ... ..	Knaresborough ... ..	18838	9174
Mrs. M. E. Bowes ... ..	Harrogate ... ..	22410	45850
T. Millward ... ..	Pateley Bridge ... ..	75071	7065
F. S. Metcalfe ... ..	Ripon ... ..	51602	13785
<i>Area No. 4.—Barkston Ash.</i>			
W. Bortoft ... ..	Tadcaster ... ..	44911	11060
W. Wormald ... ..	Aberford ... ..	27482	23100
S. C. Mellor ... ..	Wetherby ... ..	64638	16448
R. A. Wilkinson ... ..	Bishopthorpe ... ..	6411	2933
<i>Area No. 5—Skyrack.</i>			
G. C. Clarke ... ..	{ Guiseley ... ..	10126	22488
H. Wood ... ..	{ Horsforth ... ..	5758	17014
	Ilkley ... ..	48757	32821
<i>Area No. 6.—Worth Valley.</i>			
J. A. Sharp ... ..	Keighley ... ..	15472	48580
Miss A. Hartley ... ..	Bingley ... ..	12773	21424
W. H. Ogden ... ..	Haworth ... ..	8560	8673
L. M. Greenwood ... ..	Wilsden ... ..	2638	3000
<i>Area No. 7.—East Morley.</i>			
C. W. Calverley ... ..	Farsley ... ..	2927	9813
H. Darnborough ... ..	Drighlington ... ..	1135	4064
L. M. Greenwood ... ..	Denholme ... ..	2536	2662
A. Hotchin ... ..	Pudsey ... ..	2399	14762
L. Clough ... ..	Shipley ... ..	2182	30243
F. Higginson ... ..	Hunsworth ... ..	1381	1318
<i>Area No. 8.—Calder.</i>			
J. H. Hindle ... ..	Todmorden ... ..	40355	37887
F. Madders ... ..	Brighouse ... ..	12544	40520
A. Sutcliffe ... ..	Sowerby ... ..	26079	44313
<i>Area No. 9.—Spen Valley.</i>			
W. H. Holt ... ..	Batley ... ..	6485	49099
Miss G. Wormald ... ..	Gildersome ... ..	992	3044
H. Jackson ... ..	Heckmondwike ... ..	2832	23295
E. R. Brearley ... ..	Mirfield ... ..	3394	12114
Miss E. W. Haigh ... ..	Morley ... ..	3385	23396
J. Terry Smith ... ..	Ossett ... ..	3333	14838
F. Higginson ... ..	Cleckheaton ... ..	1756	12136
<i>Area No. 10.—Lower Agbrigg.</i>			
W. Town ... ..	Horbury and Normanton ... ..	41345	93489
<i>Area No. 11.—Osgoldcross.</i>			
Mrs. L. I. Dodsworth ... ..	Hemsworth East ... ..	34750	59668
I. Scott ... ..	Hemsworth West ... ..		
W. Town ... ..	Pontefract ... ..	54103	97416
<i>Area No. 12.—Goole and Selby.</i>			
H. S. Miller ... ..	Goole ... ..	38043	29026
W. B. Weaver ... ..	Selby ... ..	38256	16006
<i>Area No. 13.—Don Valley.</i>			
F. Grisedale ... ..	Bolton-on-Deane ... ..	21587	28491
Do. ... ..	Mexborough ... ..	7906	35361
A. J. Thorsby ... ..	Tickhill ... ..	42973	36651
J. Thurgood ... ..	Adwick-le-Street ... ..	26176	46379
H. E. Newton ... ..	Thorne ... ..	38419	31154
<i>Area No. 14.—Staincross.</i>			
E. Hammerton ... ..	Darton and Darfield ... ..	21572	70508
W. Taylor ... ..	Worsborough ... ..	7250	17039
B. J. B. Marsden ... ..	Stocksbridge ... ..	38238	19141
W. G. Wild ... ..	Wortley ... ..	8082	3142
H. Dowson ... ..	Ecclesfield ... ..	7037	16018
H. Redfearn ... ..	Penistone ... ..	35109	17828

Name of Officer.	District Served	Area in Acres	Population.
<i>Area No. 15.—Upper Agbrigg.</i>			
E. Firth ... ..	Colne and Holme ... ..	59752	81145
A. Smith ... ..	Saddleworth ... ..	16930	12577
Miss J. Lees ... ..	Springhead ... ..	1555	4833
<i>Area No. 16.—Rother Valley.</i>			
F. S. Butcher ... ..	Rotherham Rural ... ..	8880	14312
W. J. Blyth ... ..	Rawmarsh ... ..	4963	22169
G. C. Hearn ... ..	Maltby ... ..	20037	29262
T. H. Harrison ... ..	Wath-on-Dearne ... ..	9012	32638
C. F. Airey ... ..	Kiveton Park ... ..	20070	17034

**County Public Assistance Institutions.  
Medical and Nursing Staffs.**

Name of Hospital.	Medical Officer (part-time)	Qualifications.	Number of Nursing Staff.
Settle	B. S. Hyslop	M.B., CH.B.	4
Skipton	W. H. Robinson	M.B., CH.B.	9
Great Ouseburn	J. M. Benson	M.B., CH.B.	2
Knaresborough	H. Steinbach	M.R.C.S., L.R.C.P.	16*
Ripon	S. Hey	M.R.C.S., L.R.C.P.	4
Tadcaster	J. P. Scatchard	M.B., B.S., M.R.C.S., L.R.C.P.	4
Wetherby	J. A. Hargreaves	M.B., C.M.	3
Otley	W. H. Galloway	M.R.C.S., L.R.C.P.	7
Keighley	T. L. Walker	M.B., CH.B.	39*
	Consultants—part time, called by M.O. as required:—		
	H. C. Ling	M.R.C.S., L.R.C.P.	
	W. H. G. M. Ling	F.R.C.S., L.R.C.P.	
Clayton, Bradford	W. Cunliffe	L.R.C.P., L.R.C.S.	34*
Todmorden	H. Thorp	M.B., CH.B., D.P.H.	8*
Batley	J. J. O'Reilly (whole-time resident)	M.B., F.R.C.S., D.P.H.	71*
	R. Herley (Ophthalmic Surgeon)	L.R.C.P., L.R.C.S.	
	J. W. Applegate (Anaesthetist)	M.R.C.S., L.R.C.P.	
Wakefield	J. W. Thomson	M.B., C.M.	38
	J. B. Lyle (Visiting Physician)	M.D., CH.B., B.A.O.	
	L. T. Wells (Consultant for Ears, Eyes, Nose and Throat)	M.R.C.S., L.R.C.P.	
	M. Purdie (M.O., i/c U.V. Ray)	M.B., CH.B.	
Hemsworth	T. C. A. Sweetnam	M.D., B.Ch., B.A.O.	12
Pontefract	G. Burnett	M.B., CH.B., F.R.C.S.	24*
Goole	A. M. Erskine	M.D., CH.B., B.A.O., D.P.H.	5
Selby	O. L. Scarborough	M.R.C.S., L.R.C.P.	6
Penistone	A. A. Masser	M.B., CH.B.	5
Grenoside	A. Anderson	M.B., C.M., D.P.H.	10
†Saddleworth	J. Loftus	M.B., CH.B.	2

\* Includes Male Attendants.

† This Institution was closed 31/12/34.

## PART I.

## GENERAL PUBLIC HEALTH.

## Summary of Vital Statistics—1934.

AREA of Administrative County ... .. 1,625,058 acres.

ESTIMATED RESIDENT POPULATION ... .. 1,534,900  
(For purposes of Birth and Death Rates)

POPULATION at 1931 Census ... .. 1,530,405

SANITARY DISTRICTS, 147, namely :—11 Boroughs.

(See Table I., folded in at page 16). 108 Urban Districts.

28 Rural Districts.

The Vital Statistics for the Administrative County for the decennia 1913—22 and 1923—32, and for the years 1933 and 1934 are summarised as follows:—

	Averages for 10 years :—			
	1913-22	1923-32	1933	1934
<b>Birth Rate</b>	21·8	18·1	15·0	15·2
	(per 1,000 estimated population.)			
<b>Death Rates :—</b>				
All Causes	14·0	12·2	12·2	11·7
Zymotic	1·04	0·44	0·30	0·41
Phthisis (Tuberculosis of Respiratory System.)	0·81	0·63	0·49	0·44
Other Forms of Tuberculosis	0·36	0·22	0·14	0·12
Respiratory Diseases	2·53	1·86	1·36	1·16
Cancer	1·06	1·28	1·42	1·44
Heart Disease	1·44	1·95	2·58	2·66
	(Death rates are all per 1,000 estimated population.)			
<b>Infantile Mortality</b>	102	76	70	58
	(i.e., Number of deaths under one year per 1,000 live births.)			

## AREA.

No change was made in the area of the Administrative County or that of any Sanitary District during the year 1934. The area of each Urban and Rural District is shown in the Table folded in at page 16.

## Births.

The number of live births registered in the Administrative County during the year 1934 was 23,393, of which 11,994 were males and 11,399 females. This total which is 309 in excess of that for the previous year, produced a rate equal to 15·2 of the estimated mid-year population. In the urban districts the birth rate was 14·6 per 1,000 and 16·7 for the rural districts.

The average County birth rate during the 10 years 1924-33 was 17·6 per 1,000. Still births numbered 1,183 (males 647, females 536). The birth rate for England and Wales for the year 1934 was 14·8 per 1,000 of the population compared with 14·4 for 1933.

An analysis of the County birth records has been made in the tables on the following pages, and the actual number of births registered, with the associated birth rates are shown in the table folded in at page 16, which gives the principal Vital Statistics for each sanitary district in the County.

The districts recording the highest birth rates during the year under review include the following :—Bolton-upon-Deane 19·6, Conisbrough 22·6, Cudworth 22·0, Darton 20·8, Hemsworth 23·0, Knottingley 22·4, Maltby 26·2, Pontefract M.B. 19·0, Royston 19·9, Thurnscoe 21·4, Worsborough 19·0, Doncaster R. 19·2, Hemsworth R. 21·4, Rotherham R. 19·6, Thorne R. 24·1. The districts having the lowest birth rates during the year were :—Farsley 10·1, Haworth 8·3, Hebden Bridge 10·9, Hipperholme 10·4, Holmfirth 8·9, Kirkburton 10·6, Mytholmroyd 9·9, New Mill, 9·6, Saddleworth 9·7, Silsden 9·6, Slaithwaite 10·5, Todmorden M.B. 10·7, Bowland R. 9·7, Keighley R. 10·8, Sedbergh R. 7·6.



## West Riding Administrative County.

## Birth Rate for the 34 years 1901—1934.



## Deaths.

The number of nett deaths registered for the Administrative County during the year 1934 was 17,988. Of these, 9,249 were males, and 8,739 females, and the total corresponds to an annual rate of 11.7 per 1,000 of the estimated population. The general death rate for the urban districts of the County was 12.3 per 1,000, and for the rural districts 10.3 per 1,000.

The 1934 death rate of 11.7 per 1,000 compares favourably with the average rate of 12.2 for the County during the preceding 10 years, and with that of 11.8 for England and Wales for the year 1934. During 1934, deaths exceeded births in 65 districts.

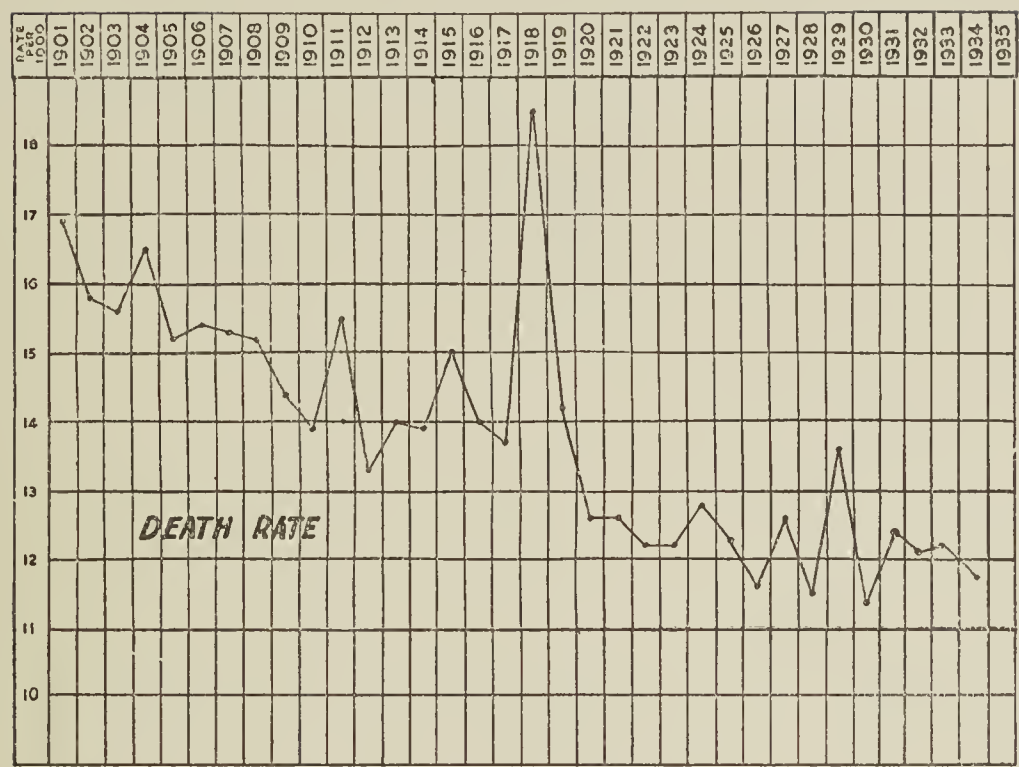
An analysis has been made of the death returns in the statistical tables on pages 13 to 20, and the figures for the County are tabulated in the tables folded in at page 16.

The highest death rates were recorded at Hebden Bridge 16.7, Kirkburton 17.1, Lepton 16.7, Mytholmroyd 16.4, Queensbury 17.1, Soyland 17.2, Springhead 16.7.

The districts with the lowest death rates during 1934 were the following:—Adwick-le-Street 8.1, Bentley-with-Arksey 8.8, Greasbrough 8.4, Maltby 7.7, Doncaster R. 8.1, Kiveton Park R. 7.6, Thorne R. 8.2.

West Riding Administrative County.

Death Rate for the 34 years 1901—1934.



Adjusted Death Rates.

The general death-rate of a district is usually expressed in the Annual Reports of Medical Officers of Health as the number of deaths from all causes per thousand of the population. This is termed the crude death rate.

The crude rate whilst being a fairly reliable measure for the comparison of the mortality experience of the same community as between one year and another, is not so for comparing the mortality of different communities, because other factors besides the general health conditions of a community appreciably affect the level of its death rate.

The main factors affecting the level of the death rate of a community besides hygienic or health conditions are the sex and age proportions of its population. The mortality is heaviest at the two extremes of life, and a population containing a large proportion of children under five years of age and old people, will have a higher death rate, apart from its general health conditions, to the extent that it contains these proportions, than one which contains a preponderance of persons between, say, 5 and 45 years of age. Also females, generally speaking, have a lower death rate at all ages than males, and the level of the death-rate of a community is accordingly affected by its sex constitution.

To correct the crude death rate with regard to the sex and age constitution of the population, the Registrar General has supplied an adjusting factor for each area, by which its crude death rate can be multiplied “in order to make it comparable, from a mortality point of view, with the crude death rate of the country as a whole or with the mortality of any other local area, the crude death rate of which should be similarly modified with its own factor for the purpose.”

The adjusted death-rates for each district in the Administrative County are given (alongside the column showing the crude death rates) in Column 9 of the long table headed “Births, Deaths, Annual Rates, etc., 1934” folded in at page 16.

The figures show that those districts which have increased rapidly in population in the last decade, mainly by the accretion of youthful elements, have very low crude death rates, but their adjusted death-rates approximate more to those of the districts where the population has remained steady or decreased.

The following are some examples:—

District.				Death rates, 1934.	
				Crude	Adjusted
URBAN.					
Adwick-le-Street	...	...	...	8.1	12.0
Bentley-with-Arksey	...	...	...	8.8	12.2
Bolton-upon-Dearne	...	...	...	9.1	12.3
Conisbrough	...	...	...	9.9	13.0
Maltby	...	...	...	7.7	11.4
Thurnscoe	...	...	...	9.5	14.0
Whitwood	...	...	...	9.6	13.0
RURAL.					
Doncaster	...	...	...	8.1	10.7
Hemsworth	...	...	...	9.8	12.8
Rotherham	...	...	...	9.8	12.1
Thorne	...	...	...	8.2	10.8

The rates for the total Urban and Rural Districts of the Administrative County are:—

				Crude	Adjusted
Urban Districts	...	...	...	12.3	13.0
Rural Districts	...	...	...	10.3	11.3

## Mortality at Different Ages from the Various Causes.

The following table shows the mortality, in age groups, from the various causes in the West Riding Administrative County during 1934.

CAUSES OF DEATH				AGE AT DEATH												Total (net deaths)
				Under 1 year	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 35	35 and under 45	45 and under 55	55 and under 65	65 and under 75	75 and up- wards		
1. Typhoid and paratyphoid fevers ...	...	...	...	—	—	—	1	—	2	1	2	1	—	—	7	
2. Measles ...	...	...	...	36	62	50	16	—	2	—	—	—	—	—	166	
3. Scarlet fever ...	...	...	...	4	7	29	22	2	3	2	1	—	—	—	70	
4. Whooping Cough ...	...	...	...	21	14	8	2	—	—	—	—	—	—	—	45	
5. Diphtheria ...	...	...	...	4	7	69	171	6	1	1	2	—	—	—	261	
6. Influenza ...	...	...	...	5	3	4	4	7	26	18	30	34	33	18	182	
7. Encephalitis Lethargica ...	...	...	...	—	1	—	6	4	11	3	7	5	4	—	41	
8. Cerebro-spinal fever ...	...	...	...	6	3	4	13	10	1	—	2	3	—	—	42	
9. Poliomyelitis ...	...	...	...	—	1	—	2	—	—	—	—	1	—	—	4	
10. Polio-encephalitis ...	...	...	...	—	—	1	1	—	1	—	—	—	—	—	3	
11. Tuberculosis of respiratory system ...	...	...	...	1	1	1	6	150	161	116	124	63	42	6	671	
12. Other Tuberculous diseases ...	...	...	...	12	21	32	39	21	15	13	14	5	7	2	181	
13. Syphilis ...	...	...	...	9	—	—	—	1	—	4	8	9	2	—	33	
14. General paralysis of the insane, tabes dorsalis ...	...	...	...	—	—	—	—	—	4	12	18	18	4	3	59	
15. Cancer, malignant disease ...	...	...	...	3	2	2	4	12	40	130	327	647	697	343	2207	
16. Diabetes ...	...	...	...	—	—	1	4	7	13	10	17	82	112	44	290	
17. Cerebral hæmorrhage, etc. ...	...	...	...	—	—	—	—	—	4	18	73	220	444	350	1109	
18. Heart disease ...	...	...	...	—	—	2	42	63	72	142	327	742	1438	1254	4082	
19. Aneurysm ...	...	...	...	—	—	—	—	2	—	4	3	6	8	2	25	
20. Other circulatory diseases ...	...	...	...	1	—	2	—	—	2	7	23	149	402	467	1053	
21. Bronchitis ...	...	...	...	58	17	11	5	7	8	14	35	85	170	231	641	
22. Pneumonia (all forms) ...	...	...	...	176	105	68	41	35	41	66	100	124	148	86	991	
23. Other respiratory diseases ...	...	...	...	8	2	4	8	3	5	6	21	33	25	27	142	
24. Peptic ulcer ...	...	...	...	—	—	—	—	3	9	16	35	33	32	6	134	
25. Diarrhœa, etc. ...	...	...	...	68	7	6	5	3	8	8	4	5	11	8	133	
26. Appendicitis ...	...	...	...	—	—	4	22	16	19	15	19	12	4	2	113	
27. Cirrhosis of liver ...	...	...	...	—	—	—	1	1	—	3	7	13	13	2	40	
28. Other diseases of liver, etc. ...	...	...	...	—	—	—	—	1	5	5	17	59	54	30	171	
29. Other digestive diseases ...	...	...	...	17	8	13	25	20	25	34	45	69	63	50	369	
30. Acute and chronic nephritis ...	...	...	...	2	1	2	12	20	29	36	81	176	240	105	704	
31. Puerperal Sepsis ...	...	...	...	—	—	—	—	8	35	8	3	—	—	—	54	
32. Other puerperal causes ...	...	...	...	—	—	—	—	17	41	22	2	—	—	—	82	
33. Congenital debility, premature birth, malformations, etc. ...	...	...	...	777	1	5	5	1	1	—	—	—	—	—	790	
34. Senility ...	...	...	...	—	—	—	—	—	—	—	—	1	86	462	549	
35. Suicide ...	...	...	...	—	—	—	1	10	28	36	31	41	37	7	191	
36. Other violence ...	...	...	...	21	7	33	56	100	101	78	88	90	74	82	730	
37. Other defined diseases ...	...	...	...	118	28	32	79	94	95	146	184	321	331	180	1608	
38. Causes ill defined ...	...	...	...	—	2	—	1	—	—	—	1	3	6	2	15	
ALL CAUSES ...				1347	300	384	594	624	808	974	1651	3050	4487	3769	17988	
URBAN DISTRICTS:—				AGE AND SEX DISTRIBUTION OF THE NET DEATHS												
Males ...				522	93	146	211	237	269	374	642	1305	1820	1172	6791	
Females ...				374	103	117	228	212	313	351	620	1054	1636	1564	6572	
Persons ...				896	196	263	439	449	582	725	1262	2359	3456	2736	13363	
RURAL DISTRICTS:—																
Males ...				268	50	59	85	97	114	124	221	378	562	500	2458	
Females ...				183	54	62	70	78	112	125	168	313	469	533	2167	
Persons ...				451	104	121	155	175	226	249	389	691	1031	1033	4625	
WEST RIDING ADMINISTRATIVE COUNTY:—																
Males ...				790	143	205	296	334	383	498	863	1683	2382	1672	9249	
Females ...				557	157	179	298	290	425	476	788	1367	2105	2097	8739	
Persons ...				1347	300	384	594	624	808	974	1651	3050	4487	3769	17988	

## West Riding Birth and Death Rates for Ten Years.

The following table shows the County Birth and Death Rates for the past 10 years:—

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
Birth Rate ...	20.1	19.4	17.7	17.7	16.7	16.9	16.1	15.8	15.0	15.2
Death-rate ...	12.3	11.6	12.6	11.5	13.6	11.4	12.4	12.1	12.2	11.7
Infant Mortality* ...	81	73	79	62	89	65	74	70	70	58
Zymotic Death-rate ...	0.53	0.46	0.51	0.28	0.54	0.33	0.38	0.39	0.30	0.41
Death rates from:—										
Small-pox ...	Nil	Nil	0.01	0.01	0.00	0.00	Nil	Nil	Nil	Nil
Scarlet Fever ...	0.03	0.02	0.02	0.02	0.05	0.03	0.02	0.01	0.02	0.05
Diphtheria ...	0.05	0.06	0.04	0.06	0.08	0.09	0.10	0.08	0.08	0.17
Enteric Fever ...	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.01	0.00
Measles... ...	0.14	0.05	0.21	0.05	0.10	0.06	0.11	0.10	0.03	0.11
Whooping Cough ...	0.13	0.16	0.11	0.04	0.18	0.05	0.05	0.09	0.07	0.03
Diarrhœa, &c.† ...	8.23	7.41	5.63	5.53	6.96	4.59	5.10	6.00	6.07	3.21
Respiratory Diseases ...	2.15	1.78	2.12	1.46	2.22	1.35	1.64	1.33	1.36	1.16
Phthisis... ...	0.70	0.62	0.65	0.61	0.66	0.57	0.57	0.52	0.49	0.44
Other Tuberculous Diseases ...	0.26	0.22	0.21	0.22	0.21	0.20	0.16	0.17	0.14	0.12

\* Deaths under one year per 1,000 births.

† Deaths under two years of age per 1,000 births.



SANITARY DISTRICT.	AREA (Acres).	ESTIMATED POPULATION 1934.	BIRTHS (Net).	DEATHS (Net).	Deaths under one year.	Annual Rates per thousand of Estimated Population					Rate of Infant Mortality (Deaths under 1 year per 1,000 Births).		MEDICAL OFFICER OF HEALTH.		
						Birth Rate	Crude Rate	Adjusted Death-rate.	Death Rate.	Phthisis Rate.	Other Tuberculous Diseases Death Rate.	Respiratory Death Rate.			
I. URBAN.															
Adwick-le-Street	3605	19810	360	160	27	18.2	8.1	12.0	0.45	0.66	0.20	1.56	0.83	75	A. B. Duane.
Ardsley	1838	4791	60	51	2	12.5	10.6	11.8	0.63	0.63	—	0.83	0.83	33	H. Scholefield.
Ardsley, East and West	4017	9308	132	110	2	14.2	11.8	13.9	0.75	0.43	—	1.07	1.07	53	B. G. Ewing.
Baildon	2606	9282	150	100	6	16.2	10.8	10.8	0.22	0.32	—	0.97	0.97	40	E. G. Firth.
Barkisland	2424	1514	23	15	2	15.2	9.9	9.8	1.98	—	—	—	—	87	A. J. W. Stephen.
Barnoldswick	2764	11310	131	163	8	11.6	14.4	14.8	0.74	0.56	0.12	0.94	0.94	61	H. C. Alderton.
Batley M.B.	3227	33890	453	436	20	13.4	12.9	13.8	0.48	0.66	0.06	0.84	0.84	44	G. H. Pearce.
Bentley-with-Arksley	5128	16670	304	146	23	18.2	8.8	12.2	0.48	0.66	0.05	0.84	0.84	76	A. B. Duane.
Bingley	11675	21540	287	280	9	13.3	13.0	12.4	0.19	0.51	0.05	0.46	0.46	31	O. T. Wade.
Birkinshaw	924	3090	41	45	4	13.3	14.6	14.7	—	—	—	2.27	2.27	98	J. G. Bremner.
Birstall	1234	7101	96	97	5	13.5	13.7	14.5	0.42	0.14	0.14	1.83	1.83	52	A. Dick.
Bolton-upon-Deane	2325	13860	272	126	17	19.6	9.1	12.3	0.29	0.58	0.14	0.79	0.79	62	J. K. W. Morris.
Brighouse M.B.	2231	19550	250	274	16	12.8	14.0	14.8	0.20	0.56	0.10	1.13	1.13	64	R. Sutherland.
*Burley-in-Wharfedale	3136	3895	59	41	2	15.6	10.8	19.0	—	0.79	0.26	0.79	0.79	34	H. T. Bates.
Calverley	2106	3619	42	45	2	11.6	12.4	11.6	—	0.28	0.28	0.55	0.55	48	N. Hughes.
Castleford	564	21010	337	258	26	16.0	12.3	14.4	0.81	0.38	0.10	1.67	1.67	77	W. Kemp.
Clayton West	1142	1809	18	25	32	9.9	13.8	14.4	—	0.85	—	1.11	1.11	—	R. N. Farrer.
Conisbrough	1593	17630	399	175	15	22.6	9.9	13.5	0.32	0.95	0.17	0.85	0.85	80	J. McArthur.
Cudworth	1746	9160	208	95	15	22.0	10.0	13.5	0.32	0.95	0.42	1.06	1.06	72	J. L. Elliott.
Darfield	2018	5324	92	51	3	17.3	9.6	11.1	0.19	0.75	0.19	1.31	1.31	33	J. W. Whitworth
Darton	4361	12890	268	139	16	20.8	10.8	13.4	0.61	0.31	0.08	1.71	1.71	60	R. Millar.
Denby and Cumberworth	4302	3266	41	45	2	12.6	13.8	14.1	—	0.61	0.39	1.22	1.22	49	G. H. Arison.
Dentholme	2586	2568	33	39	2	12.8	15.2	13.1	1.18	0.94	0.24	2.36	2.36	104	G. Horne.
Dodworth	1917	4234	77	63	8	18.2	14.9	18.6	0.72	0.24	—	1.21	1.21	35	W. S. Sykes.
Drighlington	1135	4146	46	62	2	11.1	15.0	14.8	0.29	0.38	0.10	1.94	1.94	60	R. N. Denning.
Earby	3519	5148	57	79	2	11.1	15.3	15.2	0.29	1.26	—	—	—	59	J. A. Smith.
Elland	1994	10500	117	161	7	11.1	8.9	9.7	0.63	0.15	—	0.92	0.92	45	W. Steven.
Emley	3556	1581	17	14	1	10.8	13.9	13.6	0.55	0.62	0.55	1.58	1.58	72	J. A. Smith.
Farsley	821	6537	66	91	3	10.1	13.9	13.6	0.67	—	—	0.67	0.67	—	C. C. Hargreaves.
Fetherstone	4431	14580	251	170	18	17.2	11.7	14.1	0.56	0.84	—	1.12	1.12	135	W. S. Sykes.
Flockton	1108	1491	14	13	—	9.4	8.7	10.8	0.56	0.84	—	0.64	0.64	77	R. T. E. Naismith.
Garforth	1519	3571	52	50	7	14.6	14.0	14.4	—	0.41	0.21	0.86	0.86	71	W. S. Sykes.
Gildersome	992	3144	39	44	3	12.4	14.0	14.4	0.41	0.79	0.25	0.84	0.84	74	A. M. Erskine.
Golear	1593	9680	112	153	8	11.6	15.8	16.4	0.84	0.79	0.25	1.09	1.09	95	F. C. Collinson.
Goole M.B.	1267	20180	363	236	27	18.0	11.7	12.5	0.54	0.69	0.46	1.09	1.09	41	F. Clegg.
Greensbrough	2413	3678	63	31	6	17.1	8.4	9.3	0.23	0.52	—	1.38	1.38	51	A. J. I. Muschamp
Greetland	626	4355	49	61	2	11.3	14.1	13.5	—	0.52	—	1.38	1.38	51	G. H. Arison.
Guiseley	1555	5776	79	75	4	13.7	13.0	13.5	—	0.52	—	1.38	1.38	51	G. H. Arison.
Gunnwate & Ingbirchworth	2087	319	2	8	—	6.3	25.1	27.1	0.28	0.43	—	1.71	1.71	48	J. Mahr.
Harrogate M.B.	3277	39210	442	573	21	11.3	14.6	12.3	0.18	0.88	0.18	1.71	1.71	48	J. Mahr.
Haworth	2337	5680	47	79	—	8.3	13.9	12.8	0.18	0.88	0.18	1.71	1.71	48	J. Mahr.
Hebden Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Hebden Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Heddon Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Heddon Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Heddon Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Heddon Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Heddon Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Heddon Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Heddon Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Heddon Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Heddon Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Heddon Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Heddon Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Heddon Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Heddon Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Heddon Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46	1.46	30	F. J. Dowdall.
Heddon Bridge	476	6175	67	103	2	10.9	16.7	15.5	—	0.65	0.16	1.46			













Average Birth and Death Rates from 1914 to 1933.

The following table gives the average rates for quinquennial periods (compared with the rates for 1934) for the Urban and Rural Districts of the Administrative County, and for the Administrative County as a whole.

	Urban Districts					Rural Districts					Administrative County				
	Quinquennial Periods				Year 1934 for comparison	Quinquennial Periods				Year 1934 for comparison	Quinquennial Periods				Year 1934 for comparison
	1914-18	1919-23	1924-28	1929-33		1914-18	1919-23	1924-28	1929-33		1914-18	1919-23	1924-28	1929-33	
Birth Rate ... ..	20.0	21.0	18.1	15.2	14.6	23.6	24.2	21.7	18.4	16.7	20.9	21.8	19.1	16.1	15.2
*Infant Mortality ...	108	91	77	72	56	104	89	73	76	60	107	90	76	73	58
Death Rates:—															
All Causes ... ..	15.2	13.0	12.5	12.8	12.3	14.4	12.1	11.3	11.2	10.3	15.0	12.8	12.2	12.3	11.7
Zymotic Diseases	1.23	0.66	0.45	0.34	0.41	1.31	0.74	0.46	0.49	0.41	1.24	0.68	0.45	0.39	0.41
Smallpox ... ..	0.00	0.00	0.00	0.00	Nil	0.00	Nil	0.00	Nil	Nil	0.00	0.00	0.00	0.00	Nil
Scarlet Fever ...	0.04	0.03	0.02	0.03	0.05	0.04	0.03	0.03	0.02	0.05	0.04	0.03	0.02	0.03	0.05
Diphtheria ... ..	0.18	0.09	0.05	0.08	0.19	0.11	0.10	0.04	0.10	0.13	0.16	0.09	0.05	0.08	0.17
Enteric Fever ...	0.06	0.04	0.02	0.02	0.00	0.07	0.03	0.02	0.01	0.01	0.07	0.03	0.02	0.02	0.00
Measles ... ..	0.39	0.15	0.11	0.07	0.10	0.41	0.16	0.12	0.10	0.12	0.40	0.16	0.11	0.08	0.11
Whooping Cough...	0.22	0.11	0.11	0.08	0.02	0.22	0.13	0.12	0.12	0.04	0.22	0.12	0.12	0.09	0.03
Respiratory Diseases ... ..	2.76	2.35	2.04	1.62	1.15	2.61	2.08	1.84	1.47	1.18	2.72	2.28	1.99	1.58	1.16
Respiratory Tuberculosis ... ..	0.92	0.78	0.68	0.59	0.47	0.76	0.60	0.58	0.50	0.35	0.88	0.73	0.66	0.56	0.44
Other Tuberculous Diseases ... ..	0.42	0.31	0.24	0.17	0.12	0.35	0.27	0.22	0.19	0.11	0.40	0.30	0.23	0.18	0.12
Cancer ... ..	1.09	1.15	1.29	1.44	1.56	0.91	1.01	1.12	1.17	1.15	1.04	1.11	1.24	1.36	1.44
Heart Disease ...	1.53	1.48	1.78	2.57	2.84	1.31	1.29	1.46	2.00	2.22	1.47	1.43	1.69	2.41	2.66
†Diarrhoea (Deaths in children under 2 years of age) ...	15.44	11.30	7.46	4.95	3.09	17.87	12.29	6.07	7.33	3.46	15.92	11.59	7.04	5.73	3.21

\* Deaths under one year per 1,000 births.  
† Deaths per 1,000 births.

Urban and Rural Statistics for 1934.

These are set out below for the aggregate districts, and a comparison is afforded with the figures for England and Wales:—

	Annual Rates per 1000 of the Estimated Population						Infant Mortality (Deaths under one year per 1000 Births)
	Birth-rate	Death rate	Zymotic* Death rate	Phthisis Death rate	Other Tub. Diseases Death rate	Respiratory Death rate	
(1) Urban Districts in the West Riding ...	14.6	12.3	0.41	0.47	0.12	1.15	56
(2) Rural Districts in the West Riding ...	16.7	10.3	0.41	0.35	0.11	1.18	60
(3) WEST RIDING ADMINISTRATIVE COUNTY	15.2	11.7	0.41	0.44	0.12	1.16	58
(4) England & Wales ... ..	14.8	11.8	0.36	0.64	0.13	?	59

\* Includes deaths from Diarrhoea, etc., under two years of age only.

Infant Mortality.

The present low rate of infant mortality is a matter for congratulation: such a low rate has never been reached before in this County since records were available. To this might be added a remark on the mortality of later age groups. The Minister of Health in his Presidential Address at the National Conference on Maternity and Child Welfare on July 1st, 1935, pointed out that “In the matter of mortality among children of the age groups between one and five years, the figures show that the death rates for these groups have declined in no less degree than the death rates for infants under one year of age. The death rate per 1,000 in the second year of life was 13 in 1933 as compared with 35 in the quinquennium starting in 1911; in the third year six as compared with 14; in the fourth year, four as compared with nine, and in the fifth year, three as compared with six.” This statement quite clearly refutes the contention of some that the saving of infant life is merely a postponement of death to a year or two later than the first twelve months, or at any rate a survival of “weaklings” as passengers on the community. The Minister went on to say “I believe that to a very large extent this achievement has been due to the health-visiting service and the establishment of centres up and down the country.”

When the causes of infantile mortality are further analysed, congenital debility, malformation and premature birth still contribute the largest factor (33.21) to the total infant mortality. Next in order come a group of “other causes” generally not easily classifiable (7.57), and then pneumonia (7.53), and bronchitis (2.48), which should probably be added together to make one group, and these respiratory conditions are followed by diarrhoea (2.91) which is the lowest rate ever recorded for this affection. A table showing the infantile death rates for each year since 1911 from the various causes is given on the next page and in columns 6 and 14 of the table headed “Births, Deaths, Annual Rates, etc. 1934” which is folded in at this page, statistics are given for each Urban and Rural District.



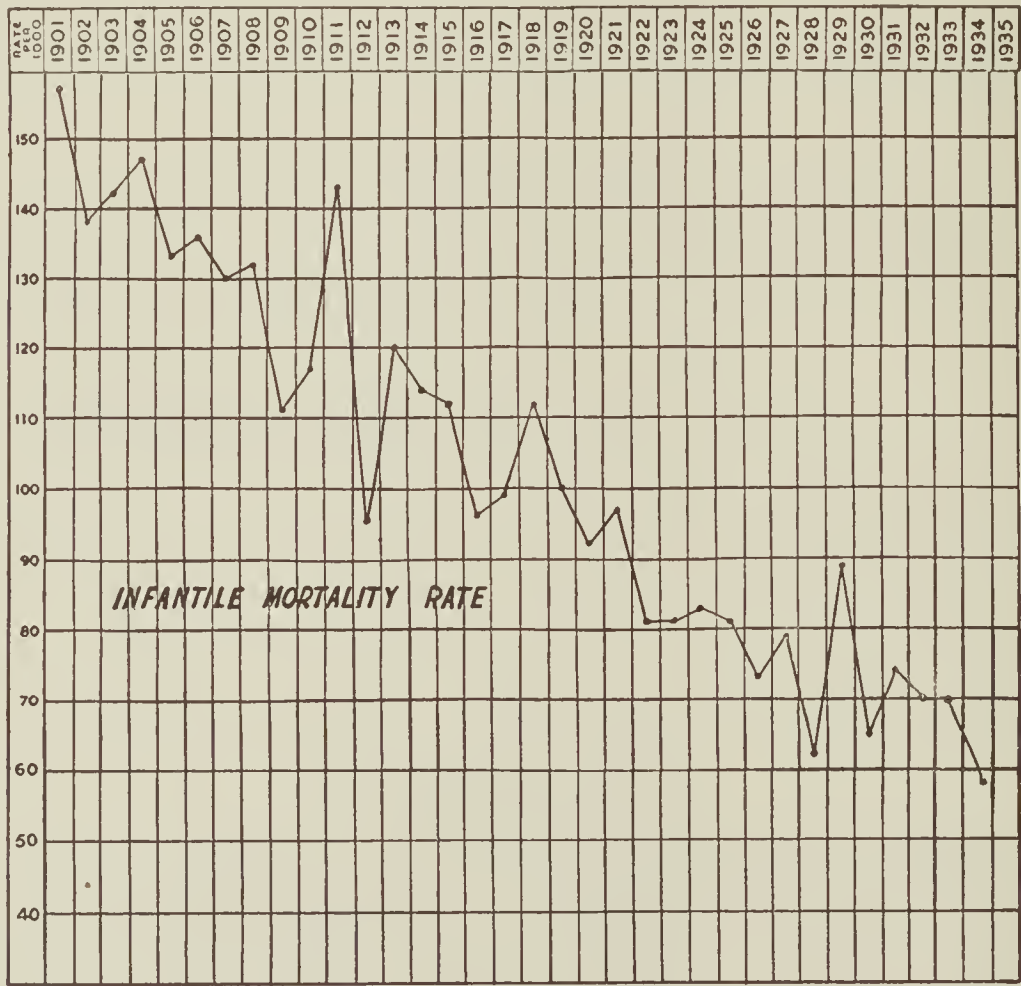
West Riding Administrative County.

Causes of Infant Mortality in the years 1912-34.

Year	Number of Deaths under One Year per 1000 births															Total (All Causes)
	Enteric Fever	Smallpox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Respiratory Tuberculosis	Other Tuberculous Diseases	Bronchitis	Pneumonia	Other Respiratory Diseases	Diarrhoea	Congenital Debility and Malformation Premature Birth	Other Causes	
1912	nil.	nil.	2.67	0.05	3.94	0.18	0.36	0.15	2.87	8.31	8.66	0.61	6.71	40.81	19.61	94.93
1913	nil.	nil.	2.59	0.11	2.35	0.16	0.19	0.19	3.42	10.30	12.94	0.40	20.12	45.41	21.42	119.60
1914	nil.	nil.	2.87	0.05	5.48	0.24	0.24	0.21	3.01	9.36	11.41	0.53	18.19	41.86	20.48	113.93
1915	0.03	nil.	4.20	0.21	4.28	0.21	0.21	0.15	2.90	10.07	12.91	0.35	14.48	41.47	20.65	112.12
1916	nil.	nil.	1.35	0.09	2.68	0.09	0.25	0.31	2.34	9.64	11.05	0.77	10.96	34.45	21.86	95.84
1917	nil.	nil.	2.70	0.04	2.67	0.18	0.25	0.36	2.45	10.17	12.24	0.71	8.11	34.72	23.73	98.33
1918	nil.	nil.	5.05	nil.	7.50	0.07	5.01	0.36	1.53	11.19	14.18	0.57	9.77	36.68	19.87	111.78
1919	nil.	nil.	0.88	nil.	1.62	0.11	2.85	0.35	1.80	12.25	12.39	0.63	8.55	39.14	19.46	100.03
1920	nil.	nil.	2.48	0.05	1.64	0.11	1.14	0.16	2.09	9.88	11.04	0.42	11.92	31.65	19.15	91.73
1921	nil.	nil.	0.17	0.03	4.53	0.03	1.10	0.31	1.76	7.82	13.40	0.37	14.22	36.94	16.52	97.20
1922	0.03	0.03	1.69	nil.	2.91	0.10	0.51	0.16	1.95	6.75	11.86	0.38	6.52	33.50	14.51	80.90
1923	nil.	nil.	1.81	0.06	2.16	0.06	0.55	0.36	1.55	6.71	11.00	0.48	7.10	33.52	15.91	81.27
1924	nil.	nil.	1.09	nil.	2.67	nil.	1.48	0.06	1.35	6.14	15.47	0.61	6.72	33.10	13.96	82.65
1925	nil.	nil.	1.88	0.06	2.92	0.29	0.62	0.29	1.46	6.22	13.09	0.45	7.06	33.17	13.41	80.92
1926	nil.	nil.	0.47	0.03	4.02	0.07	0.20	0.17	1.23	5.35	10.97	0.43	6.45	30.87	13.16	73.42
1927	nil.	0.19	2.65	0.08	2.79	0.08	1.04	0.15	1.45	5.33	15.46	0.37	4.73	32.35	12.49	79.16
1928	nil.	nil.	0.56	0.04	1.11	0.07	0.33	0.04	1.67	2.59	9.31	0.30	4.71	30.14	11.49	62.36
1929	nil.	0.04	1.41	nil.	4.97	0.24	2.54	0.24	0.90	6.65	17.44	0.31	6.14	33.75	13.92	88.55
1930	0.04	nil.	0.89	nil.	1.89	0.23	0.08	0.08	1.20	2.47	8.71	0.23	3.86	34.00	11.45	65.13
1931	nil.	nil.	1.12	nil.	1.52	0.08	0.72	0.20	1.28	4.78	13.25	0.28	4.42	35.34	10.72	73.71
1932	0.04	nil.	1.15	nil.	2.59	0.21	1.03	0.04	1.23	4.28	10.20	0.16	4.93	34.26	9.46	69.58
1933	nil.	nil.	0.17	nil.	1.82	0.09	1.90	nil.	0.56	3.08	12.09	0.13	5.37	36.35	8.40	69.96
1934	nil.	nil.	1.54	0.17	0.90	0.17	0.21	0.04	0.51	2.48	7.53	0.34	2.91	33.21	7.57	57.58

West Riding Administrative County.

Infantile Mortality Rate for the 34 years 1901—1934.



EPIDEMIOLOGY.

Particulars regarding the incidence of the seven principal Zymotic Diseases are given below. The combined death-rate from these diseases was 0.41 per 1,000 of the estimated population compared with the average of 0.42 for the 10 years, 1924-33:—

Zymotic Disease.	No. of Cases 1934.	No. of Deaths 1934.	Ratio of Deaths.	
			(a) per 1,000 persons attacked.	(b) per 1,000 persons living.
(1) Smallpox ...	1	Nil	Nil.	Nil
(2) Scarlet Fever ...	6645	70	10.53	0.05
(3) Diphtheria ...	3062	261	85.23	0.17
(4) Enteric Fever ...	36	7	194.44	0.00
(5) Measles ...	*	166	?	0.11
(6) Whooping Cough ...	*	45	?	0.03
(7) Diarrhoea, etc., under two years ...	*	75	?	0.05
Total of chief Zymotic Diseases ...	?	624	?	0.41

\*The numbers of cases of measles, whooping cough and diarrhoea are not available, as these diseases are not compulsorily notifiable in every district in the Administrative County.

The following table gives the number of cases notified, and rate per 1,000 population in the Administrative County during the years 1930-1934. The number of notifications in 1934 in each Sanitary District will be found in the table folced in at page 22, and paragraphs with regard to the incidence of the principal infectious diseases will be found on this and following pages.

Diseases.	Number of Cases Notified.					Cases Notified per 1,000 population.				
	1930	1931	1932	1933	1934	1930	1931	1932	1933	1934
Small-pox ... ..	617	146	—	3	1	0.40	0.09	—	0.00	0.00
Scarlet Fever ... ..	5726	2952	3261	6218	6645	3.73	1.91	2.12	4.05	4.33
Diphtheria ... ..	1727	1537	1590	1652	3062	1.13	1.00	1.04	1.08	2.00
Enteric Fever ... ..	148	95	200	58	36	0.10	0.06	0.13	0.04	0.02
Puerperal Fever ... ..	89	91	89	60	63	*3.43	*3.65	*3.66	*2.60	*2.69
Puerperal Pyrexia ... ..	157	151	134	149	172	*6.05	*6.06	*5.51	*6.45	*7.35
Cerebro-Spinal Fever ... ..	115	608	345	175	70	0.07	0.39	0.22	0.11	0.05
Acute Poliomyelitis ... ..	16	12	8	37	14	0.01	0.01	0.01	0.02	0.01
Acute Polio-Encephalitis ... ..	15	3	2	1	—	0.01	0.00	0.00	0.00	—
Encephalitis Lethargica ... ..	35	13	19	9	13	0.02	0.01	0.01	0.01	0.01
Ophthalmia Neonatorum ... ..	108	121	101	87	105	*4.16	*4.86	*4.15	*3.77	*4.49
Erysipelas ... ..	769	680	572	670	808	0.50	0.44	0.37	0.44	0.53
Respiratory Tuberculosis ... ..	1717	1796	1411	1431	1225	1.12	1.17	0.92	0.93	0.80
Other Forms of Tuberculosis	874	765	630	548	559	0.57	0.50	0.41	0.36	0.36

\*Cases notified per 1,000 Registered Births.

### SMALL-POX.

One case of small-pox was notified in the Administrative County during the year. The patient had been a resident in Spain and within eight days of arrival in this country he developed the symptoms of the disease. The measures taken to prevent spread of infection were obviously effective, there being no further cases.

### SCARLET FEVER.

Scarlet fever was still prevalent in the Administrative County during 1934, the number of notified cases (6,645) being slightly in excess of that for 1933, when there were 6,218.

The districts with the highest attack rates in 1933 still had high attack rates in 1934, but in general they were showing signs of falling. Some districts with low attack rates in 1933 now show a marked increase. The fact that the number of cases of this disease is still increasing does not alter the view that scarlet fever comes in waves of 4 or 5 years. The increase would appear to be due to the expected epidemics not occurring simultaneously throughout the County.

The disease was generally of a mild type with less formidable complications.

### DIPHTHERIA.

During 1934 this disease showed a marked increase in incidence, the total number of notified cases being 3,062, and 261 deaths, compared with 1,652 and 122 deaths during the year 1933.

The districts with the highest number of cases were:—Batley B. 175, Bingley U. 70, Castleford U. 72, Featherstone U. 113, Keighley B. 215, Shipley U. 80, Swinton U. 102, Wath-upon-Deane U. 72, Wombwell U. 85, Hemsworth R. 79, Rotherham R. 70, Thorne R. 106.

The notifications for the past five years are as follows:—

	1930	1931	1932	1933	1934
No. of cases ... ..	1,727	1,537	1,590	1,652	3,062
Deaths ... ..	135	153	117	122	261
Mortality per thousand cases	78.2	99.5	73.6	73.9	85.2

A large proportion of the cases were of the severe type, due to infection with the gravis strain of the organism. Infection with this strain is mainly responsible for increase in the proportion of fatal cases, as the usual methods of treatment are often unavailing.

Immunisation against diphtheria, introduced into the schools of the Administrative County in 1932, was continued with increasing demand owing to the severity of the epidemic.

Through the County Council scheme, immunisation was offered free to all school children and also to those under school age.

The procedure adopted was similar to that outlined in the 1933 report.

The following figures show the increase in the demand for immunisation.

Year.	No. of Districts.	No. of children who received immunising injections or in the process of doing so.
1932 ... ..	9	2,232
1933 ... ..	11	4,063
1934 ... ..	53	16,524
1935 (to 31st March) ... ..	47	30,876



Early in 1935 an additional arrangement was made which enabled parents to have their children immunised free of cost by private medical practitioners. The material for immunisation was supplied, and a fee for each injection paid to the practitioner by the County Council.

The following methods are, therefore, now available for the immunisation of children in the Administrative County.

1. Clinics are held in the schools.
2. Private medical practitioners may do the work.
3. Parents may take their children to a Child Welfare Centre.

It is to be hoped that the demand for immunisation continues to increase, for by this means the incidence of diphtheria could be reduced considerably, and so bring nearer the time when a case of diphtheria will be regarded as a rarity.

The number of school children in the Administrative Area is approximately 225,000, and as a little less than a quarter have been immunised, the progressive demand for immunisation cannot be too strongly urged. In particular, it is desirable for the younger children from the age of one year upwards also to take advantage of this protective measure.

In view of the improvement in methods of manufacture, it is hoped the "one shot system" of immunisation will be efficient and satisfactory for use on a large scale. If this improvement should take place, the cost of immunisation per person will be reduced by some 60%.

### ENTERIC FEVER.

There were 36 cases of typhoid or paratyphoid fever notified during 1934 as compared with 58 in the year 1933.

The districts affected were as follows:—

BOROUGH AND URBAN DISTRICTS.							Cases	Notified
Bingley	...	...	...	...	...	...	...	1
Brighouse M.B.	...	...	...	...	...	...	...	1
Conisbrough	...	...	...	...	...	...	...	3
Garforth	...	...	...	...	...	...	...	1
Harrogate M.B.	...	...	...	...	...	...	...	2
Hoyland Nether	...	...	...	...	...	...	...	1
Knottingley	...	...	...	...	...	...	...	1
New Mill	...	...	...	...	...	...	...	1
Normanton	...	...	...	...	...	...	...	2
Ossett M.B.	...	...	...	...	...	...	...	1
Otley	...	...	...	...	...	...	...	2
Saddleworth	...	...	...	...	...	...	...	1
Selby	...	...	...	...	...	...	...	1
Swinton	...	...	...	...	...	...	...	1
Thurstonland and Farnley Tyas	...	...	...	...	...	...	...	1
Wath-upon-Deane	...	...	...	...	...	...	...	1
Whitwood	...	...	...	...	...	...	...	1
Wombwell	...	...	...	...	...	...	...	1
RURAL DISTRICTS.								
Doncaster	...	...	...	...	...	...	...	2
Goole	...	...	...	...	...	...	...	1
Halifax	...	...	...	...	...	...	...	1
Pontefract	...	...	...	...	...	...	...	1
Rotherham	...	...	...	...	...	...	...	3
Selby	...	...	...	...	...	...	...	1
Tadcaster	...	...	...	...	...	...	...	1
Wharfedale	...	...	...	...	...	...	...	2
Wortley	...	...	...	...	...	...	...	1

The above table shows that the cases were widely spread over the County and that three was the highest number in any one district. As the number of cases has fallen appreciably since 1932, when there were 200, it is probable that many of the cases were related to the previous outbreaks.

### MEASLES.

The County Health Visitors paid a large number of visits to cases of measles in 1934 and information as to this work is given on page 59, together with some interesting remarks on broncho-pneumonia following in cases of measles.

### ACUTE POLIOMYELITIS AND ACUTE POLIO-ENCEPHALITIS. (INFANTILE PARALYSIS.)

During the year 14 cases of acute poliomyelitis were notified. These figures show a decrease from the previous year, when a total of 38 cases was recorded. The cases occurred sporadically, and in only one district was more than one case recorded.

### CEREBRO-SPINAL FEVER. (SPOTTED FEVER.)

The number of cases of this disease in the County continues to decline, 70 being notified during the year under review. The figures for the last five years are as follows:—

Year	No. of Cases					No. of deaths.	
1930	...	...	...	115	...	...	72
1931	...	...	...	608	...	...	312
1932	...	...	...	345	...	...	159
1933	...	...	...	175	...	...	65
1934	...	...	...	70	...	...	42

The districts chiefly affected during 1934 were:—Adwick-le-Street U. 7 cases, Doncaster R. 6 cases, and Thorne R. 9 cases.







Section 1: General Information		1.1. General Information	1.2. General Information
Section 2: Financial Information		2.1. Financial Information	2.2. Financial Information
Section 3: Operational Information		3.1. Operational Information	3.2. Operational Information
Section 4: Personnel Information		4.1. Personnel Information	4.2. Personnel Information
Section 5: Compliance Information		5.1. Compliance Information	5.2. Compliance Information
Section 6: Other Information		6.1. Other Information	6.2. Other Information

## DYSENTERY.

Notifications of this disease numbered 20 during the year 1934.

Dysentery is a notifiable disease under the Public Health (Infectious Diseases) Regulations 1927, but there is reason to think that many cases are not being notified.

It is suggested that the reason for non-notification may be that on first examination of a patient dysentery may be mistaken for food poisoning, which is not a notifiable disease. It would be of great assistance if practitioners attending such cases would inform the Medical Officer of Health at once so that investigations could be carried out with the least delay.

Early information is necessary in the case of both dysentery and food poisoning.

## FOOD POISONING.

In December 1934, an outbreak of food poisoning occurred in Maltby Urban District involving 48 persons. Examination of specimens revealed that infection was due to Gaertner's Bacillus which was present in a quantity of "Savoury Duck" eaten by the infected persons. Adequate measures were at once taken to deal with the outbreak and prevent further spread.

During the same month, food poisoning was suspected to be the cause of death of a girl residing in the Worsborough Urban District. Investigations revealed that she had died from dysentery and that other four children of the same family were also suffering from the same infection. These four children all recovered and there were no further cases.

## ISOLATION HOSPITALS.

The following table gives particulars of the removal to hospital of cases of Smallpox, Scarlet Fever, Diphtheria and Enteric Fever during 1934. Columns 25 to 28 of Table folded in at this page show the removals for each district:—

	Total cases notified.	Cases removed to Hospital.	
		Number.	Percentage.
Smallpox ... ..	1	1	100.0
Scarlet Fever ... ..	6,645	5,914	89.0
Diphtheria ... ..	3,062	2,944	96.2
Enteric Fever ... ..	36	31	86.1
Total for 1934 ... ..	9,744	8,890	91.2

## Treatment of Venereal Diseases.

List of the Venereal Diseases Treatment Centres with the days and hours of attendance:—

Name of Institution	Days and Hours of Attendance.	
	Men.	Women and Children.
Barnsley Clinic, Queen's Road	Monday, 8 to 10 p.m. Thursday, 6-30 to 9-30 p.m.	Thursday 3 to 6 p.m.
Bradford St. Luke's Hospital	Monday and Saturday, 9.30 a.m.; Tuesday, 6 p.m.	Monday, 5 to 7 p.m.; Tuesday, 5-30 p.m. and Friday, 10 a.m.
Burnley Victoria Hospital	Monday 10 to 11 a.m. and 5-30 to 6-30 p.m.; Thursday 5-30 to 6-30 p.m.	Friday 11 a.m. to 12 noon, and 5.30 to 6.30 p.m.
Dewsbury Infirmary	Monday, 3 to 5 p.m.; Thursday, 7 to 9 p.m.	Monday 3 to 5 p.m.; Thursday, 7 to 9 p.m.
Doncaster Royal Infirmary	Tuesday, 4 to 6 p.m.; Friday, 9 to 11 a.m. and 4 to 6 p.m.	Monday, 4 to 6 p.m.; Friday, 2 to 4 p.m.
Goole, Bartholomew Hospital	Friday, 8 p.m.	Friday, 5 p.m.
Halifax Royal Infirmary	Thursday, 6 to 8 p.m.	Tuesday, 3.30 to 4.30 p.m., and 6 to 8 p.m.
Huddersfield Royal Infirmary	Monday, Tuesday, Thursday, Friday 6 to 8-30 p.m.; Wednesday 10 to 12 noon.	Monday, Tuesday, Thursday, Friday, 6 to 8-30 p.m.; Wednesday 10 to 12 noon.
Keighley Victoria Hospital	Tuesday and Thursday, 7.30 to 8.30 p.m.	Tuesday and Thursday, 6 to 7 p.m.
Leeds General Infirmary	Monday to Friday (inclusive), 10 a.m. to 12 noon, and 2 to 7 p.m.; Saturday, 10 a.m. to 12 noon.	Monday, 1.30 to 3.0 p.m.; Thursday, 5.30 to 7 p.m.
Oldham Royal Infirmary	Tuesday, 7.30 p.m., and Wednesday, 7.30 p.m.	Monday, 7-30 p.m.
Rotherham T.B. Dispensary, 12 Frederick Street	Tuesday, 9-30 to 11 a.m. and 5-30 to 8 p.m.; Wednesday, 5-30 to 8 p.m.	Friday, 11-30 a.m. to 12-30 p.m. and 6 to 8 p.m.
Sheffield Jessop Hospital for Women	—	Tuesday and Thursday, 5 to 7.30 p.m. Saturday, 11 a.m. to 1-30 p.m. In-patients only.
Sheffield Children's Hospital	Thursday, 7 to 9 p.m.; Saturday, 12-30 to 2-30 p.m.; Tuesday and Friday, 7 to 9 p.m.	Thursday, 10 a.m. to 1 p.m.
Sheffield Royal Hospital	Tuesday and Thursday, 2 to 4 p.m.; Wednesday, 6 to 8 p.m.; Friday, 5-30 to 7-30 p.m.	Tuesday and Thursday, 2 to 4 p.m.
Wakefield Clayton Hospital	Wednesday, 6 to 8 p.m.; Friday, 10 to 12 noon.	Monday, 4 to 6 p.m.; Friday, 3 to 5 p.m.
York County Hospital	Monday, 3 to 4 p.m.; Thursday, 6 to 7 p.m.; Friday, 7.30 to 8.30 p.m.	Wednesday, 3 to 4 p.m.; Friday, 7 to 7.30 p.m.

Table showing the Venereal Diseases Treatment Centres and the number of attendances, etc. during 1934 :—

Centre	No. of new patients				No. of doses of Arseno-benzene Compounds	No. of In-patient days	No. of Out-patient attendances
	Syphilis	Soft Chancre	Gonorrhoea	Non-Venereal			
Barnsley Clinic, Queen's Road	19	—	52	52	149	336	8,110
Bradford St. Luke's Hospital	23	—	43	37	367	276	3,262
Burnley Victoria Hospital ...	1	—	2	3	13	—	55
Dewsbury Infirmary ...	17	—	55	38	335	65	5,912
Doncaster Royal Infirmary ...	52	—	115	28	704	225	9,173
Goole, Bartholomew Hospital	4	1	5	8	54	19	441
Halifax Royal Infirmary ...	16	—	33	100	307	202	2,579
Huddersfield Royal Infirmary	18	—	64	38	237	44	5,541
Keighley Victoria Hospital ...	5	1	59	16	132	41	3,488
Leeds General Infirmary ...	107	—	154	140	3,861	63	13,151
Oldham Royal Infirmary ...	—	—	5	2	10	—	107
Rotherham T.B. Dispensary, 12, Frederick Street ...	27	—	28	45	181	29	3,223
Sheffield Royal Hospital ...	16	—	25	1	137	—	508
Wakefield Clayton Hospital ...	53	1	90	55	973	51	5,773
York County Hospital ...	2	—	10	8	103	188	908
	360	3	740	571	7,563	1,539	62,231

Table giving an analysis of the combined returns of treatment centres for the year 1934, compared with previous years :—

Year.	New Patient	Doses of Arsenobenzen-Compounds.	In-patient days.	Out-patient attendances.
1929	1543	6397	1226	55092
1930	1538	6257	3115	54468
1931	1490	7563	3460	54922
1932	1513	7852	2107	53383
1933	1484	7330	3644	57868
1934	1674	7563	1539	62231

The above figures relate to treatment of patients from the Administrative Area of the County.

From the tables above it is seen that there is a slight increase in the number of new patients, and an associated increase in the number of doses of arseno-benzene compounds used and in attendances of out-patients. The increase in attendances of out-patients is considerably more than can be accounted for solely by 190 new patients, and, though other factors are present, the inference can be drawn that patients are realising more fully that it is to their own ultimate advantage to continue attendance at the clinics until medically discharged.

Defaulters there will always be, but it is gratifying to notice a trend, however slight, towards their decrease.

The number of in-patient days appears to be very considerably below that of immediately previous years but this is not strictly correct. It has often been emphasised in former reports that the figures for the Hope Hospital, Leeds, do not admit of comparison with those of other clinics owing to patients being admitted to the former as a home and maintained there until cured or otherwise suitably transferred, while at the latter patients are admitted on account of some acute condition and discharged to attend as out-patients as soon as the acute condition has passed. For this reason it has been decided to exclude the Hope Hospital return from the general table and give the figures separately.

During 1934, 19 patients were maintained at the Hope Hospital, Leeds, making a total of 1,595 in-patient days. 35 injections of arseno-benzene compounds were given.

The number of general practitioners approved in accordance with the requirements of the Ministry of Health to receive Arseno-benzene Compounds is now 87. The number of doses supplied was 980. During the year two practitioners applied for admission to the list and in both cases the request was granted.

### PROPAGANDA.

As in former years propaganda by means of film displays was carried out in a number of districts. During the first tour in March, the itinerary was Pontefract, Featherstone, Normanton, Altofts, Knottingley, Methley, Hemsworth, Kippax, Stanley, Sherburn-in-Elmet, Castleford and Outwood, and during the second tour in November and December, Thurnscoe, Darton, Dodworth, Worsborough, Meltham, Darfield, Golcar, Slaithwaite, Linthwaite and Marsden, were visited.

This form of propaganda continues to be very successful, and many letters of appreciation were received. At the larger halls the attendances numbered well over 1,000 and many were unable to gain admission. It is estimated that approximately 10,000 persons heard the lectures, and a welcome feature noted was an increase in the attendance of young men and young women.



## Public Health Legislation, etc., during 1934.

Below is a list of Orders, Circulars and Memoranda which have been issued, and Acts passed in 1934, in connection with public health matters.

### I.—ORDERS, CIRCULARS AND MEMORANDA ISSUED BY THE MINISTRY OF HEALTH.

Circular No.	GENERAL.
1370 and 1406 and Report	Nutrition—Report of Conference between representatives of the Advisory Committee on Nutrition and representatives of a Committee appointed by the British Medical Association May 1934.
Memo. 180/Med.	Bed-Bug and how to deal with it. Memorandum on, March, 1934.
1371 and 1427	Public Health (Imported Food) Regulations, 1925; Public Health (Imported Food) Amendment Regulations, 1933. To Port Sanitary Authorities and certain Sanitary Authorities (England and Wales). January 11th, 1934 and August 1st, 1934.
1405	Water Supplies (Exceptional Shortage Orders) Act, 1934. Summary of Provisions. May 24th, 1934.
1418 and Regns.	The Public Health (Treatment of Infectious Disease) Regulations, dated June 25th, 1934.
1446	Public Health (Shell-fish) Regulations, 1934. To Port and other Sanitary Authorities. December 12th, 1934.
Memo. 183 W.	Rainwater for Domestic Supplies. July, 1934.
Memo. 179 W.	Water Supplies, Chlorination of. February, 1934.
—	The Milk (Special Designations) Order, dated November 28th, 1934.
1342	Prevention of Epidemic, Endemic and Infectious Diseases. The Public Health (Shell-fish) Regulations, dated December 7th, 1934.

#### TREATMENT OF TUBERCULOSIS.

None issued except routine circulars or returns.

#### HOUSING AND TOWN PLANNING.

1412 and 1438	Housing Acts, Housing (Rural Workers) Acts, and Small Dwellings Acquisition Acts—Interest on Loans, etc. June 14th, 1934 and October 26th, 1934. To Local Authorities England and Wales.
—	House Production, Slum Clearance, etc., England and Wales. Statement, showing for the period up to September 30th, 1934, the number of houses provided with State Assistance, the number of houses provided without State Assistance, the progress made in carrying out slum clearance programmes, and certain other particulars relevant to the housing activities of Local Authorities. November, 1934.
—	Summary of the principal Provisions of the Housing Acts and Public Health Acts in relation to the maintenance of dwelling-houses in a reasonably fit condition for human habitation.
Order	Housing, England. The Ministry of Health (Rate of Interest) Amendment Order dated June 8th, 1934.
„	The Housing (Rate of Interest) Amendment Order, dated June 8th, 1934.
„	The Local Authorities (Assisted Housing Schemes) Amendment Regulations, dated June 27th, 1934.
Rules	The Town and Country Planning (Determination of Questions as to Compensation and Betterment) Rules, dated August 1st, 1934.
Regulations	Landlord and Tenant, England. Rent Restriction. The Rent Restrictions Regulations, dated July 26th, 1934.
—	Housing, England and Scotland. Treasury Minute, dated August 15th, 1934, prescribing Maximum Rates of Interest.

#### MATERNITY AND CHILD WELFARE.

1408	Birth Control. To Maternity and Child Welfare Authorities. May 31st, 1934.
1433	Maternal Mortality. To Maternity and Child Welfare Authorities, October, 10th, 1934.

### II.—ACTS OF PARLIAMENT.

Rural Water Supplies Act, 1934.  
 Supply of Water in Bulk Act, 1934.  
 Water Supplies (Exceptional Shortage Orders) Act, 1934.  
 Milk Act, 1934.  
 Shops Act, 1934.

# HOUSING AND GENERAL SANITARY MATTERS.

A. BROOK, Chief County Sanitary Inspector.

## Housing.

### Provision of New Houses.

As will be seen from the statement below, the erection of new houses in the Riding is still progressing rapidly; the number built during 1934 being more than 2,000 in excess of those provided in 1933.

The erection of houses during the past 5 years is set out below:—

	1930	1931	1932	1933	Year 1934
By Local Authorities and Private Enterprise under assisted schemes.	1316	1851	2968	2016	1183
Unassisted (Years ended 30th September)	1977	2725	3297	5049	8024
TOTALS ...	3293	4576	6265	7065	9207

It would be invidious to make comparisons between different districts in the County in respect of increased or decreased activity in the building of new dwellings and without due regard being paid to the circumstances of each area, erroneous conclusions might be drawn. Subject to this proviso and irrespective of the areas and populations of the districts concerned, the ten sanitary districts, which return the largest numbers of new houses provided during the year were:—Harrogate M.B. 399, Rotherham R.D. 392, Doncaster R.D. 319, Bentley-w-Arksey U.D. 294, Wortley R.D. 277, Great Ouseburn R.D. 270, Pontefract R.D. 210, Hunsworth U.D. 206, Keighley M.B. 193, Pudsey M.B. 180.

The number of houses completed with State Assistance has fallen to 1,183 during the year, 779 being provided under the Housing (Financial Provisions) Act, and 404 under the Housing Act, 1930.

In spite of the increased rate of building, there is still a need for more houses in some parts of the Riding. The following extracts are taken from the Annual Reports of the local Medical Officers of Health.

Bingley U.D.	"Overcrowding in the small houses continues."
Darton U.D.	"There is a great shortage of working class houses in the district."
Drighlington U.D.	"There are several bad cases of overcrowding."
Hebden Bridge U.D.	"There are a number of houses occupied by members of more than one family and overcrowding exists in a few instances."
Keighley M.B.	"Cases of overcrowding come before the notice of the Department from time to time and in the instances investigated the persons concerned expressed a difficulty in finding houses of suitable size and rents within their means."
Methley U.D.	"Houses required; three bedroom type and also smaller houses for aged people."
Shelf U.D.	"Overcrowded in centre of district."
Skipton U.D.	"There is still a great demand for houses of low rentals, at the close of the year."
South Crosland U.D.	"A few cases of overcrowding and consequent shortage."
Stanley U.D.	"Shortage of houses still prevalent and overcrowding still bad. The Council still building."
Thurnscoe U.D.	"A certain amount of overcrowding exists particularly in the nature of two families occupying one house, owing to financial inability to pay rent."
Whitwood U.D.	"Overcrowding general, shortage of houses to deal with overcrowding."
Penistone R.D.	"There is general overcrowding in the area; many of the houses are very small with poor bedroom accommodation; many are old, damp, dilapidated and inadequately lighted."
Rotherham R.D.	"Overcrowding is present in some local instances. The shortage of houses is being gradually met."
Wakefield R.D.	"Overcrowding still exists in every part of the area and there is still a shortage of houses."
Wortley R.D.	"A local census taken during the year shows that there is still a certain amount of overcrowding."



### Housing Statistics.

Summary of Housing Work showing the action taken under the provisions of the Housing Act, 1925; the Housing Act, 1930, and the Housing Consolidated Regulations, 1925, the Housing Consolidated Amendment Regulations, 1932 or matters arising therefrom.

#### 1.—INSPECTION OF DWELLING-HOUSES DURING THE YEAR.

	Urban Districts	Rural Districts	Totals
(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ... ..	23455	6554	30009
(2) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925—1932 ... ..	11211	3514	14725
(3) Total number of inspections made ... ..	38622	11036	49658
(4) Number of dwelling-houses needing further action ... ..	12909	3062	15971
(a) Number considered to be in a state so dangerous or injurious to health as to be unfit for human habitation ... ..	2624	769	3393
(b) Number (excluding those in sub-head (a) above), found not to be in all respects reasonably fit for human habitation ... ..	10285	2293	12578

*Totals of (4)—(a) and (b) should equal figure given for (4).*

#### 2.—REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICES.

No of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers ... ..	8266	1133	9399
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#### 3.—ACTION UNDER STATUTORY POWERS DURING THE YEAR.

##### A. Proceedings under Sections 17, 18, 23, Housing Act, 1930.

(1) No. of dwelling-houses in respect of which notices were served requiring repairs ... ..	1176	657	1833
(2) No. of dwelling-houses which were rendered fit after service of formal notices ... ..	738	486	1224
(a) By owners ... ..	721	476	1197
(b) By Local Authority in default of owners ... ..	17	10	27

##### B. Proceedings under Public Health Acts:—

(1) No. of dwelling-houses in respect of which notices were served requiring defects to be remedied ... ..	1833	747	2580
(2) No. of dwelling-houses in which defects were remedied after service of formal notices ... ..	1460	676	2136
(a) By owners ... ..	1319	670	1989
(b) By Local Authority in default of owners ... ..	141	6	147

##### C. Proceedings under Sections 19 and 21 of the Housing Act, 1930:—

(1) No. of representations, etc., made in respect of dwelling-houses unfit for habitation ... ..	999	366	1365
(2) No. of dwelling-houses in respect of which Demolition Orders were made ... ..	484	249	733
(3) No. of dwelling-houses demolished in pursuance of Demolition Orders ... ..	171	97	268
(4) No. of dwelling-houses in respect of which undertakings were accepted from owners—Section 19 (2) ... ..	402	61	463
(a) To render houses fit for human habitation ... ..	322	44	366
(b) As to usage other than for human habitation ... ..	80	17	97

##### D. Proceedings under Section 20 of the Housing Act, 1930:—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ... ..	169	4	173
(2) Number of separate tenements or underground rooms closed in pursuance of Closing Orders ... ..	76	—	76
(3) Number of separate tenements or underground rooms, the Closing Orders in respect of which were determined, the tenement or room having been rendered fit ... ..	6	—	6

##### E. Outstanding houses dealt with during 1934 under the Housing Act, 1925:—

NOTE:—Sections 11 to 15 of the Housing Act 1925 have been repealed by the Housing Act 1930 but the proviso to Section 64 of the 1930 Act continues in force any Closing Orders and Demolition Orders made before the Housing Act 1930 came into operation, viz:— 15th August 1930, and Houses subject to these Orders must continue to be dealt with under the relative provisions of the Act of 1925.

(1) No. of dwelling-houses in respect of which Closing Orders were outstanding ... ..	185	27	212
(2) No. of above houses in respect of which Closing Orders were determined, houses having been made fit ... ..	2	—	2
(3) No. of above dwelling-houses in respect of which Demolition Orders were made ... ..	67	17	84
(4) No. of above dwelling-houses demolished in pursuance of Demolition Orders ... ..	51	44	95

NOTE:—The above statement is compiled from Returns furnished by the Medical Officers of Health of the Sanitary Authorities throughout the Administrative County.

### Slum Clearance.

The tabular statement which follows shows the action taken during 1934.

#### HOUSING ACT, 1930: ACTION TAKEN DURING THE YEAR.

	Municipal Boroughs	Urban Districts	Rural Districts	Total
<u>Clearance Orders submitted.</u>				
No. of Orders ... ..	21	79*	26	126
No. of houses to be demolished ... ..	194	801	136	1,131
No. of persons to be displaced from above houses ... ..	605	2,828	430	3,863
<u>Clearance Orders confirmed wholly, or in part.</u>				
No. of Orders ... ..	12	28*	13	53
No. of houses to be demolished ... ..	106	377	83	566
No. of persons to be displaced from above houses ... ..	343	1,246	307	1,896
<u>Houses approved for re-housing persons dis- placed</u> ... ..	158	410	325	893

\*Two Compulsory Purchase Orders comprising 7 houses and 26 persons are included in these figures, but one Clearance Order (3 houses and 10 persons) which has been withdrawn by the local authority, is excluded from the figures of orders submitted.

During the year there have been no orders which the Minister has refused to confirm.

No Improvement Areas have been declared during the year.

The continued action, resulting in the provision of new houses, the demolition of unfit dwellings, and the repair and improvement of existing houses is undoubtedly beginning to make itself felt. The result has been a marked improvement in the conditions under which the working class population are housed, and it is safe to say that this will (even if it is not already doing so), show its effect on the health of the community, particularly in connection with such diseases as tuberculosis, diseases of the respiratory system, rheumatism, and all those other diseases which are wholly or partly attributed to unsatisfactory environmental conditions.

#### Work of the County Inspectorial Staff.

During the year the Inspectorial Staff of the Department was engaged in housing work as set out below:—

##### CLEARANCE AREAS.

Inspections made and evidence given at Ministry of Health inquiries:—Baildon U.D. Clayton West U.D. Denholme U.D. (Compulsory Purchase Order). Skelmanthorpe U.D. Yeadon U.D.

##### ATTENDANCE AT MINISTRY OF HEALTH INQUIRIES.

Bingley U.D. Earby U.D. Keighley M.B. Knottingley U.D. Marsden U.D. Mexborough U.D. Royston U.D. Shipley U.D. Goole R.D. (Snaith and Cowick). Tadcaster R.D. (Tadcaster West).

##### APPEAL AGAINST DEMOLITION ORDERS.

Hoyland Nether U.D. Hearing at the County Court.

##### HOUSING SURVEYS.

Dodworth U.D. Gunthwaite and Ingbirchworth U.D. Queensbury U.D. Springhead U.D. Tickhill U.D. Yeadon U.D. Barnsley R.D. (Stainborough). Pateley Bridge R.D. (Fountains Earth). Penistone R.D. (Thurgoland). Tadcaster R.D. (Appleton Roebuck).

##### INSPECTION AND REPORTS REGARDING HOUSING CONDITIONS IN THE FOLLOWING DISTRICTS.

Denby and Cumberworth U.D. Drighlington U.D. Earby U.D. Emley U.D. Golcar U.D. Holmfirth U.D. Honley U.D. Horbury U.D. Kirkheaton U.D. Knottingley U.D. Linthwaite U.D. Luddendenfoot U.D. Mirfield U.D. Mytholmroyd U.D. Otley U.D. Ripon City U.D. Shelf U.D. South Crosland U.D. Sowerby U.D. Stanley U.D., and in the Todmorden Rural District.

Housing (Rural Workers) Acts 1926 and 1931.

Since the above Acts came into operation, applications have been received from 41 owners.

In 21 cases covering 44 houses, the applications were approved, and up to December 31st, 1934, 44 premises had been re-conditioned, at a cost to the County Council of £4,004 17s. 10d. Of this amount, half is repayable to the County Council as loan charges under Section 4(2) of the 1926 Act.

Smoke Abatement.

The tabular statement which follows shows the work accomplished by the County Sanitary Inspectors during the year in the actual observation of chimneys. It is regretted that owing to the pressure of other duties the numbers both of districts visited and actual observations taken fall below those of previous years. It is considered, however, that in most of the industrial areas of the Riding there is a steady decline in the amount of black smoke discharged into the atmosphere. There may be differences of opinion as to the explanation for this decrease, and it is not proposed to enter into a discussion here upon these divergent views. The fact remains that the reduced degree of air pollution—irrespective of the cause—is beneficial from the point of view of the health of the public. Until the question of the pollution of the atmosphere by smoke from house chimneys receives serious attention it is not to be anticipated that in the densely populated districts, at any rate, the nuisance arising from smoke and its attendant evils will disappear.

Smoke observations taken by the County Inspectors during the year 1934.

No. of observations taken in each District.	Is Byelaw in Force?	Observations showing an excessive emission of Black Smoke.				Number of observations showing:		Average Amount of Black Smoke per observation
		Number.	Maximum Emission.	Minimum Emission.	Average.	Black Smoke of 3 minutes or under.	No Black Smoke.	
			Minutes.	Minutes	Minutes.			Minutes
12	no	—	—	—	—	4	8	0.4
7	yes*	—	—	—	—	3	4	0.36
7	yes	1	6.5	6.5	6.5	2	4	1.35
7	yes	—	—	—	—	2	5	0.28
3	yes*	—	—	—	—	—	3	—
14	yes	—	—	—	—	2	12	0.28
2	yes*	—	—	—	—	2	—	1.75
6	no	—	—	—	—	1	5	0.33
1	yes	—	—	—	—	—	1	—
2	yes	—	—	—	—	—	2	—
2	no	—	—	—	—	1	1	1.38
2	yes	1	7.0	7.0	7.0	1	—	3.75
11	no	1	3.5	3.5	3.5	5	5	0.73
6	no	2	24.0	21.25	22.62	4	—	8.75
82	—	5	—	—	12.45	27	50	1.21

\* Limit of 2 minutes per 30 minutes observation.

Drainage, Sewerage and Sewage Disposal.

In the administrative area of the County, activity still continues in regard to the above matters. Building operations in various areas have necessitated extensions of sewers to serve the new houses being erected, while another factor, which sooner or later leads to a demand for proper means of drainage and sewage disposal, is the introduction of a piped water supply into areas which have previously been dependent on springs and wells.

During the year the Department was represented at inquiries held by the Ministry of Health into applications for sanction to borrow money for works of sewerage, sewage disposal, etc., as set out below :—

URBAN.

Ardsley E. and W.  
Denby and Cumberworth.  
Shipley.  
Thurnscoe.

RURAL.

Barnsley—Carlton.  
Knaresborough—Killinghall.  
Wakefield—Warmfield cum Hcath.

Investigations or inquiry were also made by the Department as to drainage, sewerage, etc. in the following areas :—

URBAN

Denby and Cumberworth.  
Drighlington.  
Hemsworth.  
Hoyland Nether.  
New Mill.  
Queensbury.  
Shepley.

RURAL.

Bishopthorpe—Copmanthorpe.  
Great Ouseburn—Upper Poppleton.  
Pontefract—Bcal.  
Thorne—Thorne.  
Wharfedale—Esholt and Menston.



## Water Supplies.

Activity in connection with the water supplies has continued during the year, and the work of the Department has included investigations regarding water supplies in 9 urban and 12 rural areas.

During the year the Ministry of Health held inquiries into applications for sanction to borrow money for works in connection with water supplies as under :—

### URBAN.

Cudworth.  
Horsforth.  
Shipley.  
Wath-upon-Dearne.

### RURAL.

Keighley—E. and W. Morton.  
Kiveton Park—Anston, Dinnington, Firbeck,  
Gilding Wells, Harthill-w-Woodall, Letwell,  
St. Johns-w-Throapham, Thorpe Salvin,  
Todwick, Wales and Woodsetts.  
Knaresborough—Hampsthwaite and Killinghall.  
Pontefract—Hensall.  
Selby—Newlands and Drax.  
Skipton—Cononley.  
Tadcaster—Grimston, Kirkby-c-Milford, Ryther-  
cum-Ossendyke, Sutton-c-Hazlewood,  
Towton, Ulleskelf.  
Wakefield—Sitlington.

The progress being made in different parts of the Riding, either in improving the water supplies or extending water services, so as to enable a piped and pure supply of water to become available for properties that hitherto have been dependent on wells, springs or other supplies of an even less satisfactory nature is indicative of the general interest now being taken by sanitary authorities in the County in this important matter.

Generally it can be stated that good progress is being made, and it is hoped that in the not too far distant future, there will be available, if not for every house, at least for every small hamlet, a constant supply of pure water.

## Collection and Disposal of Refuse.

In the Riding generally, local authorities are displaying commendable enterprise with regard to :—

- (a) securing efficient means of storage for domestic refuse, the moveable covered dustbin now rapidly superseding the old type open or covered ashpit.
- (b) the prompt and efficient removal of refuse, in a sanitary manner, though in some instances the use of a refuse cart or wagon primarily designed for this purpose would further improve matters.

In the urban parts in the administrative area, scavenging is practically entirely undertaken by the local authority, the work being done either by direct labour or contract, and in the rural areas this practice also is coming more and more into vogue.

During the year, in only two instances were any investigations by the County Staff called for in regard to scavenging matters.

The method of disposal of refuse cannot yet be regarded with complacency in some areas, as there are still too many refuse tips, where the refuse is simply tipped and left, or at the best only "straightened up" now and then.

These uncontrolled tips are unsightly, insanitary, in danger of fire, encourage rat infestation, are the hunting ground of the "tatter" and in some cases are frequented by local children on the look out for jars in which to put "tiddlers," old cycle wheels to be used as hoops, and other trifles.

It cannot be too strongly urged on local authorities that wherever the tipping of refuse is resorted to, the "controlled" system of tipping should operate.

During the year investigation and enquiry was made with regard to the method of refuse disposal in nine urban and two rural districts, and in one case of a refuse tip infested by crickets the advice of the department was asked for.

## Sanitary Accommodation.

The table below gives the percentage of closets on the water carriage and conservancy systems respectively in the urban and rural areas comprising the Administrative County for each of the five years 1930 to 1934 inclusive.

	Urban Areas.					Rural Areas				
	1930	1931	1932	1933	1934	1930	1931	1932	1933	1934
Water-Carriage System ...	83·93	86·98	88·93	89·87	90·29	59·84	62·15	64·54	65·65	68·24
Conservancy System ...	16·07	13·02	11·07	10·13	9·71	40·16	37·85	35·46	34·35	31·76



It will be noted that the adoption of the water-carriage system is still steadily growing.

The number of privies replaced by water closets during 1934 was 3,027, and 1,531 additional water closets were provided for existing property. The number of water closets provided in connection with newly built properties was 8,427.

During the year the Department made inspections or inquiry regarding closet accommodation in 11 urban and 14 rural districts.

### Poisons and Pharmacy Act, 1908,

At the beginning of 1934 there were 17 persons holding licences under the above Act, and six others held licences as assistants. During the year, two additional persons were licensed and one additional assistant's licence issued, bringing the figures at the end of the year to 19 licencees and seven assistants.

So far as the exigencies of other duties would permit, the usual inspections of premises and registers have been made.

### Milk Supplies.

#### MILK (SPECIAL DESIGNATIONS) ORDER, 1923.

At the end of 1933 in the administrative area of the West Riding there were 28 producers of Grade "A" milk. During the year, 3 of these relinquished their licences, one on taking out a licence for production of Grade "A" T.T. milk, in the other two cases, no reason was given. Four additional licences were granted during the year, and at the close of 1934, there were 29 licensed producers of Grade "A" milk, 27 of whom also held bottling licences.

During 1934 there were 170 samples of Grade "A" milk (produced in the West Riding Administrative Area) submitted for bacteriological examination by the County Sanitary Inspectors exclusive of Grade "A" samples of school milk supplies, particulars of which are given elsewhere in this Report; of these, 152 equal to 89.4% were satisfactory, while 18 or 10.6% failed to comply with the required standard.

Of the 32 licence holders who were on the register during the whole or part of the year, 18 received good bacteriological reports consistently, 8 were reported upon adversely each upon one occasion, 3 received adverse reports each upon two occasions, and one licence holder received unsatisfactory reports upon four separate samplings of milk produced at various periods. Samples of milk produced by the remaining two licence holders were not taken as they did not obtain their licences until the latter part of the year.

The table below gives the results of bacteriological examinations of Grade "A" milk, year by year, since the first licence was issued by the County Council in 1924.

Bacteriological examination of Grade "A" Milk.

Year.	No. of Licensed Producers at end of each year.	Total Samples examined.	Up to Standard.	Below Standard.
1924.	2	6	3	3
1925.	5	32	19	13
1926.	10	69	52	17
1927.	20	98	72	26
1928.	23	115	89	26
1929.	22	137	120	17
1930.	25	128	106	22
1931.	25	157	134	23
1932.	28	168	144	24
1933.	28	181	162	19
1934.	29	170	152	18

The usual routine inspections of premises of Grade "A" licence holders have been made during the year, and on the whole little fault was found with regard to the way in which licence holders conducted their premises.

In the hope that it may be of assistance and afford some guidance to persons interested, a statement is set out on the next page giving the general conditions which must be complied with by applicants for Grade "A" licences in the West Riding Administrative Area.

## Milk (Special Designations) Order, 1923.

Requirements to be fulfilled by Applicants for "Grade A" Licences.

### COWSHED.

**Situation.** Preferably two walls at least should be open to the external air. A clean dry approach to the shed for the cows is desirable, and a free passage for the removal of the milk. Manure dumps must be kept well away from cowsheds, and there should be no openings, other than doorways, properly fitted with doors, into any barn, food store, etc..

**Size.** No hard and fast rule can be laid down in regard to existing buildings, the following particulars however give some idea of what is desirable.

#### In a single range cowshed:—

Width without feeding passage	...	...	...	...	...	15-ft. 0-in.
Width with feeding passage	...	...	...	...	...	18-ft. 0-in.

#### In a double range cowshed with cows facing walls:—

Width without feeding passage	...	...	...	...	...	26-ft. 0-in.
Width with feeding passage	...	...	...	...	...	32-ft. 0-in.

With regard to height, where the shed is a one storey structure, the height at eaves may get so low as 7-ft. 3-in. or 7-ft. 6-in., but where the cowshed has a hayloft, etc. over, a minimum height of 8-ft. 0-in. is desirable.

**Lighting.** The lighting of the cowshed should be such as to present on a reasonably bright day—with doors closed—no difficulty in discerning condition of walls and floors in any part of the shed, as regards cleanliness. A minimum of three super feet of glass per cow is necessary to effect this, and where possible lighting should be from roof of shed.

**Artificial light.** Means for lighting of premises by electricity, gas, oil lamps, etc. should be provided.

**Ventilation.** Efficient ventilation is very essential in a cowshed and in many old premises this is most difficult to provide. Adequate provision must be made for admission of fresh air to the shed and for the egress of fouled air, and here again it is practically impossible to lay down any hard and fast rule—nearly every case needs different treatment. Where possible, however, inlets for fresh air should be provided at convenient points near the heads of the cattle, while for outlet, openings in the ridge of the roof are generally best. In practice it is found that area of outlets should slightly exceed area of inlet ventilation.

**Floors.** The floor of a cowshed should be of hard, durable, impervious material throughout, so that it can be readily kept clean. The floor must drain to a properly constructed channel discharging over a drain inlet in the open air. No drain inlet must exist in any cowshed.

**Internal walls.** Unless the internal walls are fairly smooth and capable of easy cleansing, they must be cement rendered to a height of 4-ft. 6-in.

**Fittings.** All fittings, etc. whether of wood concrete, steel, etc. must be regularly cleansed and kept clean and free from dust, etc. It is recommended that hay racks be discarded on account of difficulty in cleansing and their liability to harbour dirt.

**Eaves, gutters, etc.** All buildings should be provided with efficient eave gutters and fall pipes, so that roof water may be drained away and these should not discharge into yard surface.

**Milk room.** For cooling and bottling milk, etc., a separate room is essential. The size of course will depend upon the number of cows kept and whether milk is to be bottled or sold wholesale. Generally, however, it may be taken that the minimum size should be 10-ft. by 8-ft. by 8-ft. high. Floor should be of concrete, draining to gully outside. Internal walls should be smooth and easily cleaned. Efficient lighting and ventilation will be necessary and a good and pure supply of water must be laid on.

If it can possibly be arranged, the milkers should not enter the milk room but pour milk into a covered receiver (in a tipping passage) which delivers the milk over the cooler which must be provided via a pipe going through wall of milk room.

**Sterilising and wash up room.** If at all possible it is advantageous to have this room adjoining and under the same roof as the milk room, the partition wall between the two having doorway with sliding door, for convenient communication between the two places.

Here again, the size depends on size of herd, and whether bottling of milk is to be carried on. However, having regard to the fact that there must be a sterilising chest, wash tanks, table, etc. in the room, it will be apparent that 10-ft. by 8-ft. should be an absolute minimum size. Efficient lighting and ventilation, with easy means of exit for waste steam, will need to be provided. The walls, so far as internal surfaces go should be smooth and easily kept clean. The floor should be of concrete, draining over a properly trapped gully situate in open air.

A steam boiler of some kind will be necessary for generating the steam and supplying means for heating water, and it is advised that it be of a size easily sufficient to meet all demands that are likely to be made upon it. It is recommended, though this is not absolutely essential, that the boiler be housed in a small apartment separate from the sterilising room. The position of the milk room in relation to the cow sheds is of importance and where possible they should be in close proximity.

**Water supply.** A pure and adequate supply of water must be available on the farm premises, and it is recommended that it be laid into each cowshed in such a position that it is readily convenient for swilling purposes.

## METHODS.

Given the most up-to-date and expensive buildings and equipment, clean milk cannot be systematically produced unless continual care is exercised as regards cleanliness by the personnel. It is undisputed that methods and personnel are even more important than premises and equipment, though of course reasonably sanitary structures and equipment help in the production of a clean milk supply. The following suggestions may be found of use in helping towards the production of a "Grade A" milk.

(1) **Cleanliness of premises.** (a) Water troughs, water cisterns, etc. must be at all times kept clean and free from contamination.

(b) Swine and poultry must at all times be excluded from cowsheds, milk room, etc. Dogs, cats or other domestic animals must not be allowed in milk rooms.

(c) All interior surfaces of cowsheds, including walls, ceilings, roofs, floors and fittings of any description must be continually kept clean, free from dirt and dust.

(2) **Cleanliness of milkers, etc.** (a) Milkers or anyone engaged in bottling, handling, measuring milk or dealing with churns or other utensils, must be scrupulously clean in their persons and should be provided with overalls or coats to wear.

(b) Provision must be made for milkers to enable them to wash and dry their hands, which should be kept thoroughly clean during milking operation.

Wet milking must not be permitted.

The first stream of milk from each teat (the fore milk) should be rejected.

Covered pails or those of the dome top type must be used where hand milking is in operation.

(3) **Storage and treatment of milk.** (a) The milk must not be placed or kept in any position where it is liable to become contaminated, and vessels containing milk must be properly covered so as to protect contents from dust, flies, etc.

(b) All vessels and appliances used for containing, measuring or stirring milk must at all times be kept scrupulously clean, and when not in use, must be stored in a place set apart for the purpose, protected from dust and dirt.

(c) Vessels and appliances, including lids, must be thoroughly washed after each time of use, and must be cleansed and sterilised before being used again.

Nothing must be used in the cleansing of the vessels which might effect the milk or injure those consuming it.

Milk vessels or appliances shall not be used for purposes other than the containing of milk.

(d) Milking must be carried on in a good light, and for this purpose windows must be kept clean, and in dark weather, all lamps must be maintained in good and proper order, and must be lit previous to the commencement of milking.

(e) Before milking is begun, all dirt in or around the flanks, udder and teats of each cow must be removed, and the udder and teats must be cleansed by being thoroughly washed.

(f) All milking stools must be kept thoroughly clean.

(g) As soon as possible after milking, the milk of each cow must be removed from the cowshed to a suitable milk room.

(h) No dry bedding or other dusty matter must be moved in the cowshed during milking or within half an hour before the milking commences.

(4) **Cooling.** Milk should be cooled without delay to a temperature of not more than 5°F. higher than the temperature of the water supply available for cooling.



SUPPLY OF MILK TO SCHOOL CHILDREN.

The supply of milk in one-third pint bottles to school children, received a great impetus from the time of the introduction of the Milk Marketing Board's scheme whereby a reduction in the price of bottles of milk from 1d. to ½d. each took place.

Prior to the introduction of the scheme the average number of bottles supplied was about 44,000 per day, but the reduction in price sent up the number to approximately 130,000 bottles per day, supplied by 115 contractors. Of the liquid milk supplied to schools approximately 60% is pasteurised, and most of the remainder (40% approximately) is ordinary milk, the proportion of certified, Grade "A" (T.T.), and Grade "A" milk being small in comparison with the total milk issued.

All the premises from which the milk supply to schools is obtained are inspected prior to approval, and re-inspection of these premises is made at intervals or as considered necessary.

Samples of milk are obtained periodically for bacteriological examination and the following table gives the results of such examinations :—

Class of Milk.	Satisfactory.	Unsatisfactory.	Totals.
Certified ... ..	8	1	9
Grade "A" T.T. ...	2	—	2
Grade "A" ... ..	24	2	26
Pasteurised ... ..	49	11	60
Ordinary ... ..	250	47	297
Totals ... ..	333	61	394

The standards adopted for school milk are as follows :—

*Certified.* Not to contain more than 30,000 bacteria per c.c., or any coliform bacilli in 1/10 c.c.

*Grade "A" (Tuberculin Tested).* Not to contain more than 200,000 bacteria per c.c. or any coliform bacilli in 1/100 c.c.

*Grade "A."* Not to contain more than 200,000 bacteria per c.c., or any coliform bacilli in 1/100 c.c.

*Grade "A" Pasteurised.* Not to contain more than 30,000 bacteria per c.c., or any coliform bacilli in 1/10 c.c.

*Pasteurised.* Not to contain more than 100,000 bacteria per c.c., or any coliform bacilli in 1/100 c.c.

*Other Milk.* Not to contain more than 300,000 bacteria per c.c., or any coliform bacilli in 1/1000 c.c.

In addition to examination for bacterial content, all the above samples were examined for the presence of the tubercle bacillus. This was found in two samples of Grade "A," two pasteurised and ten of ordinary milk. Investigations were made by the Chief Veterinary Officer in each case, one pasteurised sample involving the visitation of 11 farms and the examination of 250 cows, and the other the visitation of seven farms and the examination of 102 cows. The two Local Authorities in whose area the pasteurising plants were situate and from which the samples of milk containing tubercle bacilli were obtained were also notified, in order that they might take any necessary action.

MILK AND DAIRIES CONSOLIDATION ACT, 1915.

Under the above Act a Medical Officer of Health of any local authority who has reason to suspect that tuberculosis is caused or is likely to be caused by the consumption of milk which is being sold within the West Riding Administrative Area shall endeavour to ascertain the source of supply, and on ascertaining the facts, at once notify the County Medical Officer. On receipt of such information arrangements are made forthwith with the Chief Veterinary Officer who carries out an examination of all milk producing animals on the farm.

Samples are collected from cows showing suspicious symptoms and group samples are also taken from the remainder of the herd. All samples are examined in the County Laboratory, and information as to these examinations is given on pages 44-45.

Notifications were received during the year from the following :—

Barnsley ... ..	1
Bradford ... ..	8
Bootle ... ..	1
Huddersfield ... ..	1
Leeds ... ..	5
Manchester ... ..	1
Rotherham ... ..	7
Sheffield ... ..	10
Wakefield ... ..	1
York ... ..	4
Lancashire ... ..	1



**Food and Drugs (Adulteration) Act, 1928.**  
**Quarterly Report of Samples taken during 1934.**

District.	Sampling Officer.	Samples taken during 1934				
		First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
Harrogate	W. B. Greenwood	95	106	78	104	383
Mexborough	R. Hutchison	73	78	92	80	323
Mirfield	E. Ward	128	126	109	130	493
Pontefract	H. F. Wilkinson	73	110	63	108	354
Rothwell	T. A. Bramley	83	89	83	89	344
Shipley	W. Bates	94	95	93	97	379
Skipton	T. S. Roberts	81	85	77	88	331
Sowerby	E. Bell	91	95	40	92	318
Wombwell	A. Nobbs	98	101	71	86	356
Total samples taken by Sampling Officers ...		816	885	706	874	3,281
Local Authorities ...		177	170	181	348	876
Total Samples ... ..		993	1,055	887	1,222	4,157

The above total includes 66 "appeal to the cow" samples (i.e., samples direct from the farm at the time of milking), which frequently entail early morning visits. Of the 66 samples, 48 were obtained by our Sampling Officers and 18 by Local Authorities.

Excluding the "cow" samples, 2,279 samples of milk were collected by our Officers, and 805 by local Sanitary Inspectors, making a total of 3,084 and of this total 197 or 6·0 per cent., were adulterated.

**Record of Samples for Five Years, 1925-1929 and for Five Years, 1930-1934.**

Year.	Total samples submitted by		Total examined.	Total adulterated.	Percentage adulterated.
	County Council.	Local Authorities.			
1925	2915	664	3579	192	5·4
1926	2926	688	3614	165	4·6
1927	2989	803	3792	172	4·5
1928	3034	792	3826	193	5·0
1929	2807	706	3513	207	5·8
Average for 5 years, 1925-29	2934	730	3664	186	5·0
1930	3153	702	3855	187	4·8
1931	3241	741	3982	201	5·0
1932	3308	858	4166	232	5·5
1933	3305	876	4181	263	6·2
1934	3233	858	4091	224	5·4
Average for 5 years, 1930-34.	3248	807	4055	221	5·4

It will be observed that 224 samples (or 5·4%) were reported against during the year, and these were 197 of milk and 27 other, namely :—Beef Paste 1, Beer 1, Cheese 1, Cocoa 1, Cream 1, Honey 1, Jam 1, Lime Water 1, Potted Meat 4, Rice 1, Sausage 4, Sweets 1, Vinegar 2, Beef and Malt Wine, 1, Bisurated Magnesia 1, Compound Tincture of Rhubarb 1, Glycerine 1, Glycerine of Borax 1, Sweet Spirits of Nitre 2.

The extent of adulteration in many instances only necessitated a caution, but in regard to 16 samples of milk and 2 of potted meat, proceedings were instituted.

**Particulars of Milk Samples obtained by County Sampling Officers during the past Five Years.**

Year.	Genuine.	Adulterated.	Total	Percentage Adulterated.
1930	2225	159	2384	6·7
1931	2480	181	2661	6·7
1932	2175	151	2326	6·9
1933	2089	154	2243	6·8
1934	2141	138	2279	6·0

### Milk Samples taken by Local Authorities.

The following table shows the number of samples submitted by Local Authorities. With few exceptions, each authority submits samples of milk under an arrangement whereby the County Council pays for the cost of analysis of such samples, and conducts any subsequent proceedings:—

Barnoldswick	... 48	Haworth	... 12	Royston	... 6
Batley	... 53	Hebden Bridge	... 4	Southowram	... 4
Bentley	... 24	Hemsworth	... 18	Stanley	... 17
Birstal	... 22	Horsforth	... 24	Thurlstone	... 1
Brighouse	... 37	Hoyland Nether	... 25	Todmorden B.	... 17
Castleford	... 27	Ilkley	... 9	Wath-upon-Deane	10
Cudworth	... 26	Keighley	... 16	Whitwood	... 12
Elland	... 44	Maltby	... 18	Hemsworth R.	... 39
Golcar	... 14	Ossett	... 3	Kiveton Park R.	... 12
Goole	... 3	Pudsey	... 19	Knaresborough R.	... 23
Harrogate	... 174	Rothwell	... 41	Ripon R.	... 3
					805

### PUBLIC VACCINATION.

A summary of the yearly returns supplied by Vaccination Officers for the past five years gives the following information:—

Year.	No. of Births in the Administrative County Area.	No. of Certificates of successful vaccination.	No. of Certificates of insusceptibility.	No. of Statutory Declarations of Conscientious Objection.	Others.
1929	24,775	7,576 (30.6%)	88	14,002 (56.5%)	3,109
1930	24,843	7,340 (29.5%)	84	14,801 (59.6%)	2,618
1931	23,652	6,630 (28.03%)	82	14,443 (61.1%)	2,497
1932	22,848	6,243 (27.3%)	75	14,159 (61.95%)	2,371
1933	21,522	5,283 (24.54%)	53	14,051 (65.24%)	2,135

There are 159 Public Vaccinators under contract to perform vaccinations and re-vaccinations in the 170 vaccination districts, and at the 19 County Institutions.

There are also 64 Vaccination Officers, 16 of whom are paid by salary and 48 by fees. Three hold appointments with neighbouring County Boroughs and 54 are Registrars of Births and Deaths, or have appointments under the Public Assistance Committee.

The tables set out below indicate the work done under the Vaccination Acts in the Administrative County Area during the year ended 30th September, 1934.

	No. of successful primary vaccinations of persons.			No. of successful re-vaccinations.
	Under 1 year of age.	1 year and upwards.	Total.	
Performed by Public Vaccinators	4307	212	4519	105
Performed by Medical Officers of County Institutions	7	17	24	—
	4314	229	4543	105

Detailed figures relating to the vaccinations and re-vaccinations performed by each Public Vaccinator and Medical Officer of a County Institution are given below:—

#### VACCINATIONS PERFORMED IN COUNTY INSTITUTIONS, YEAR ENDED 30TH SEPTEMBER, 1934.

Name of County Institution.	Name of Medical Officer.	Primary Vaccinations			Re-vaccinations.
		Under 1 year.	1 year and upwards.	Totals.	
Great Ouseburn	J. M. Benson	—	—	—	—
Hemsworth	T. C. A. Sweetnam	—	—	—	—
Keighley	T. L. Walker	—	—	—	—
Knaresborough	C. H. Steinbach	—	—	—	—
Penistone	A. A. Masser	—	—	—	—
Pontefract	G. Burnett	7	—	7	—
Saddleworth	J. Loftus	—	—	—	—
Sedburgh	T. W. Rothwell	—	—	—	—
Settle	B. S. Hyslop	—	—	—	—
Skipton	W. H. Robinson	—	—	—	—
Tadcaster	J. P. Scatchard	—	—	—	—
Todmorden	H. Thorp	—	11	11	—
Wetherby	J. A. Hargreaves	—	—	—	—
Wharfedale	W. H. Galloway	—	—	—	—
Goole	A. M. Erskine	—	—	—	—
Ripon	S. Hey	—	—	—	—
Selby	O. L. Scarborough	—	6	6	—
Thorne	C. D. Walker	—	—	—	—
Wortley	A. Anderson	—	—	—	—
		7	17	24	—



# Vaccination of Children whose Births were registered from 1st January to 31st December, 1933, inclusive.

Name of Vaccination Officer	Vaccination District	Number of Births returned in the "Birth List Sheets" as registered from 1st January to 31st December 1933	Number of these Births duly entered by 31st January, 1935, in Columns I, II, IV, and V of the "Vaccination Register" (Birth List Sheets), viz.					Number of these Births which on 31st January, 1935, remained unentered in the "Vaccination Register" on account (as shown by "Report Book") of			Numb'r of these Births remaining on 31st Jan., 1935, neither duly entered in the "Vaccination Register" (columns 3, 4, 5, 6 and 7 of this Return) nor tem- porarily accounted for in the "Report Book" (columns 8, 9 and 10 of this Return)	Total number of Certificates of Successful Primary Vaccination of Children under 14 received during the Calendar Year 1934	Number of Statutory Declarations of Conscientious Objection actually received by the Vaccination Officer irrespective of the dates of birth of the children to which they relate, during the Calendar Year, 1934.	Number of Children vaccinated after declaration of Conscientious Objection had been made.	Total number of Certificates of Successful Vaccination for year 1934 sent to other Vaccination Officers.
			Column I Successfully Vaccinated	Column II		Column IV Number in res- pect of whom Statutory Declarations of Conscientious Objection have been received	Column V Died Unvaccinated	Postponement by Medical Certificate	Removal to Districts, the Vaccination Officers of which have been duly apprised	Removal to places unknown, or which cannot be reached; and Cases not having been found					
				Insusceptible of Vaccination	Had Smallpox										
W. Roberts ...	Bowland Rural ...	50	22	—	—	24	3	1	—	—	—	26	15	—	3
M. A. Hargreaves ...	Do. ...	7	3	—	—	3	—	1	—	—	—	9	4	—	—
J. Peters ...	Do. ...	1	1	—	—	—	—	—	—	—	—	—	—	—	—
G. Kayley ...	Garsdale (Sedbergh) ...	5	1	—	—	4	—	—	—	—	—	2	2	—	—
W. Batty ...	Sedbergh ...	52	15	—	—	32	1	1	—	1	2	14	15	—	—
W. Slinger ...	Bentham (Settle) .....	77	26	—	—	46	1	—	1	1	2	22	63	—	7
C. Parker ...	Settle and Long Preston	99	47	—	—	47	4	1	—	—	—	58	43	—	6
G. J. Harker ...	Grassington (Skipton)	20	8	—	—	11	—	—	—	—	1	15	7	—	—
S. H. Day ...	Kettlewell (Skipton) ...	8	4	2	—	1	—	—	—	—	1	9	1	—	—
G. D. Hunt ...	Gargrave (Skipton) ...	20	10	—	—	8	—	—	1	1	—	11	6	—	—
J. E. Atack ...	Addingham (Skipton) ...	27	6	—	—	20	—	—	1	—	—	9	18	—	1
D. Slater ...	Barnoldswick, etc. (Skipton)	479	30	—	—	392	29	2	4	7	15	39	356	—	4
T. C. Crawhall ...	Gt. Ouseburn ...	472	192	2	—	190	27	—	36	12	13	258	240	—	6
J. Clark ...	Knarborough ...	128	59	—	—	59	5	—	1	—	4	71	65	—	14
Mrs. M. E. Bowes	Harrogate ...	555	219	5	—	281	20	5	7	18	—	235	283	1	11
T. Millward ...	Pateley Bridge ...	65	32	—	—	24	3	—	—	1	5	46	36	—	2
F. S. Metcalfe ...	Ripon ...	181	80	1	—	83	10	3	2	—	2	78	102	—	1
W. Bortoft ...	Tadcaster ...	132	97	—	—	22	6	2	3	2	—	112	28	—	6
W. Wormald ...	Aberford ...	279	125	1	—	133	13	1	2	2	2	155	130	—	39
S. C. Mellor ...	Wetherby ...	183	93	3	—	58	8	6	6	9	—	101	66	—	15
R. A. Wilkinson ...	Bishophthorpe ...	23	11	—	—	10	2	—	—	—	—	15	10	—	5
G. C. Clarke ...	Horsforth ...	227	73	3	—	127	6	11	4	3	—	131	137	—	29
H. Wood ...	Ilkley and Otley ...	328	141	2	—	137	9	3	7	14	15	171	157	—	3
G. C. Clarke ...	Yeadon ...	255	27	—	—	197	9	2	3	1	16	33	211	—	2
J. A. Sharp ...	Keighley ...	647	22	—	—	581	29	4	8	3	—	24	607	—	—
Miss A. Hartley ...	Bingley ...	180	15	1	—	153	9	1	—	1	—	26	157	—	3
W. H. Ogden ...	Haworth ...	70	3	—	—	62	4	—	1	—	—	—	48	—	—
L. M. Greenwood ...	Wilsden ...	57	2	—	—	44	4	—	—	—	7	2	47	—	—
C. W. Calverley ...	Farsley ...	71	43	—	—	27	1	—	—	—	—	48	37	—	9
H. Darnbrough ...	Drighlington ...	50	4	—	—	41	4	—	—	1	—	4	39	—	—
A. Hotchin ...	Pudsey ...	141	59	—	—	70	8	1	—	3	—	49	62	—	9
L. Clough ...	Shipley ...	549	49	1	—	441	35	5	6	5	7	46	443	—	10
F. Higginson ...	Cleckheaton ...	132	8	2	—	116	5	—	—	1	—	11	94	—	1
F. Madders ...	Sowerby ...	328	39	—	—	270	13	—	—	2	4	61	296	—	10
A. Sutcliffe ...	do. ...	307	11	1	—	261	10	3	—	3	18	42	269	2	16
J. H. Hindle ...	Todmorden ...	334	37	—	—	280	16	—	—	1	—	44	298	—	14
W. H. Holt ...	Batley and Gomersal ...	635	71	1	—	500	24	7	9	23	—	90	444	—	1
Miss G. Wormald ...	Gildersome ...	32	5	—	—	24	3	—	—	—	—	8	23	—	2
H. Jackson ...	Liversedge ...	309	61	—	—	233	13	1	1	—	—	55	225	—	2
E. R. Brearley ...	Mirfield ...	126	44	1	—	76	3	2	—	—	—	33	112	—	1
Miss E. W. Haigh ...	Morley ...	318	54	2	—	244	13	1	4	—	—	64	210	—	2
J. T. Smith ...	Ossett ...	163	34	3	—	108	6	—	—	12	—	42	123	—	3
W. Town ...	Horbury and Normanton, etc. ...	1200	344	5	—	720	66	7	5	16	37	336	775	—	32
Mrs. L. I. Dodsworth	Hemsworth East ...	645	192	—	—	422	19	6	3	3	—	183	420	—	6
I. Scott ...	Do. West ...	616	273	2	—	290	29	4	—	18	—	278	301	—	15
W. Town ...	Pontefract ...	1880	486	1	—	1175	84	—	—	134	—	531	1069	1	10
H. S. Miller ...	Goole ...	535	123	1	—	383	19	—	2	7	—	109	378	1	1
W. B. Weaver ...	Selby ...	216	82	2	—	121	7	2	—	2	—	101	127	—	7
F. Grisedale ...	Bolton-upon-Dearne ...	1320	278	—	—	905	82	2	21	12	20	283	970	1	18
A. J. Thorsby ...	Bawtry and Tickhill ...	628	219	—	—	253	29	—	7	120	—	191	269	—	12
J. Thurgood ...	Adwick-le-Street ...	809	156	1	—	517	47	17	2	51	18	184	468	—	17
H. E. Newton ...	Thorne ...	691	142	4	—	458	37	11	—	18	21	157	457	—	13
E. Hammerton ...	Darfield and Darton ...	1228	315	—	—	830	58	9	—	8	8	280	855	3	19
W. Taylor ...	Worsborough ...	341	100	—	—	224	15	—	—	2	—	86	191	—	9
B. J. B. Marsden ...	Stocksbridge ...	190	53	—	—	126	11	—	—	—	—	71	151	—	—
J. J. Taylerson ...	Wortley ...	46	19	—	—	25	1	—	—	1	—	13	22	—	1
H. Dowson ...	Ecclesfield ...	183	62	—	—	110	3	—	1	5	2	74	101	—	—
H. Redfearn ...	Penistone ...	224	45	—	—	147	8	5	—	14	5	33	129	—	2
E. Firth ...	Colne and Holme Valley	647	150	—	—	459	26	8	—	1	3	163	439	—	3
A. Smith ...	Saddleworth ...	94	8	—	—	81	2	—	—	2	1	11	78	—	4
Miss J. Lees ...	Springhead ...	47	6	—	—	39	1	—	—	1	—	7	41	—	—
F. S. Butcher ...	Rotherham Rural ...	255	89	1	—	147	14	—	1	1	2	84	189	—	5
W. J. Blyth ...	Rawmarsh ...	322	49	1	—	237	10	5	1	4	15	30	230	—	3
G. C. Hearn ...	Maltby ...	562	110	4	—	386	27	1	—	6	28	110	387	1	3
T. H. Harrison ...	Wath-upon-Dearne ...	486	54	—	—	379	22	—	2	3	26	41	372	—	3
C. F. Airey ...	Anston ...	235	45	—	—	177	5	—	2	2	4	38	165	—	1
		21522	5283	53	—	14051	978	141	154	558	304	5663	14113	10	422





## VACCINATIONS PERFORMED IN VACCINATION DISTRICTS, YEAR ENDED 30TH SEPTEMBER, 1934.

Name of Vaccination District.	Public Vaccinator.	Primary Vaccinations.			Re-vaccinations.
		Under 1 year.	1 year and upwards.	Totals.	
Area No. 1.—Ewecross.					
Sedbergh ... ..	T. W. Rothwell ... ..	4	—	4	—
Dent ... ..	C. A. Allan ... ..	1	—	1	—
Slaidburn ... ..	J. T. Bleasdel ... ..	—	—	—	—
Gisburn ... ..	J. T. Bleasdel ... ..	16	6	22	6
Mitton ... ..	T. G. S. Harkness ... ..	1	—	1	—
Long Preston ... ..	E. H. Marsh ... ..	10	—	10	2
Austwick ... ..	T. Lovett ... ..	1	—	1	—
Arncliffe ... ..	K. C. Crosbie ... ..	3	—	3	—
Bentham ... ..	A. J. Troughton ... ..	12	1	13	1
Malham ... ..	H. Wales ... ..	3	1	4	—
Ingleton ... ..	G. J. Marks ... ..	5	5	10	—
Settle ... ..	B. S. Hyslop ... ..	24	2	26	—
Area No. 2.—Staincliffe.					
Skipton ... ..	N. A. Macleod ... ..	18	2	20	2
Addingham ... ..	W. L. Crabtree ... ..	9	—	9	—
Barnoldswick ... ..	J. Pickard ... ..	3	7	10	2
Cowling ... ..	C. Clyne ... ..	2	—	2	1
Gargrave ... ..	H. Wales ... ..	9	—	9	—
Grassington ... ..	K. C. Crosbie ... ..	9	2	11	—
Silsden ... ..	M. Purcell ... ..	—	—	—	—
Earby ... ..	A. McKay Niven ... ..	1	2	3	—
Area No. 3.—Claro.					
Green Hammerton ... ..	R. C. Davison ... ..	27	—	27	—
Boroughbridge ... ..	F. P. Rust ... ..	25	1	26	1
Acomb ... ..	J. S. Dudgeon ... ..	17	1	18	—
Great Ouseburn ... ..	J. M. Benson ... ..	13	—	13	—
Sharow ... ..	S. Hey ... ..	6	1	7	—
Ripon ... ..	P. A. Steven ... ..	29	3	32	—
Kirkby Malzeard ... ..	R. G. M. Harvey ... ..	9	—	9	—
Knareborough ... ..	D. F. Dobson ... ..	25	—	25	—
Harrogate (part) ... ..	S. Foskett ... ..	66	6	72	—
do. (Starbeck) ... ..	S. C. Wilkinson ... ..	8	2	10	1
Ripley ... ..	S. Foskett ... ..	14	—	14	—
Bishopside ... ..	C. A. Flintoff ... ..	17	—	17	—
Birstwith ... ..	E. G. Campbell ... ..	—	—	—	—
Area No. 4.—Barkston Ash.					
Bishopthorpe ... ..	T. H. Barton ... ..	8	—	8	—
Sherburn ... ..	Wm. Murphy ... ..	36	1	37	3
Kippax ... ..	C. C. Hargreaves ... ..	47	—	47	—
Aberford ... ..	C. H. Sykes ... ..	70	1	71	—
Tadcaster ... ..	J. P. Scatchard ... ..	51	2	53	—
Boston Spa ... ..	R. W. Lee ... ..	38	6	44	—
Harewood, Sicklinghall ... ..	O. F. Barr ... ..	4	—	4	—
Thorner ... ..	O. D. Beetham ... ..	18	3	21	—
Wetherby ... ..	J. A. Hargreaves ... ..	23	3	26	3
Area No. 5.—Skrack.					
Baildon ... ..	E. G. Firth ... ..	12	—	12	—
Ilkley ... ..	T. B. Hearder ... ..	17	5	22	3
Yeadon ... ..	A. J. I. Muschamp ... ..	6	—	6	1
Horsforth ... ..	D. W. E. Burridge ... ..	22	8	30	1
Ctley ... ..	W. H. Galloway ... ..	76	3	79	4
Area No. 6.—Worth Valley.					
Keghley ... ..	F. Villy ... ..	8	—	8	—
Bingley (part) ... ..	J. M. Crocker ... ..	14	1	15	2
Cullingworth ... ..	J. M. Crocker ... ..	—	—	—	—
Haworth ... ..	J. E. Baird ... ..	2	1	3	2
Steeon ... ..	C. Clyne ... ..	5	—	5	1
Area No. 7.—East Morley.					
Hunsworth ... ..	J. A. Hope ... ..	1	—	1	1
Drighlington ... ..	H. D. Merrington ... ..	13	4	17	—
Calverley ... ..	N. A. A. Hughes ... ..	12	—	12	—
Wilsden ... ..	G. Marquis ... ..	1	—	1	—
Farsley ... ..	T. H. Elmer ... ..	16	—	16	—
Shipley ... ..	O. D. Ballinger ... ..	13	—	13	—
Denholme ... ..	A. H. Stewart ... ..	—	—	—	—
Pudsey ... ..	E. T. Hyland ... ..	43	—	43	2
Area No. 8.—Calder.					
Sowerby Bridge ... ..	V. C. Meyer ... ..	9	7	16	5
Elland ... ..	A. G. Gamble ... ..	5	1	6	1
Stainland ... ..	N. C. Beaumont ... ..	8	—	8	—
Brighouse ... ..	C. M. Stallard ... ..	23	1	24	—
Skelf ... ..	J. J. Murphy ... ..	3	—	3	—
Queensbury ... ..	G. C. Sharp ... ..	7	—	7	—
Midgley ... ..	C. S. Ogilvy ... ..	1	1	2	—
Barkisland ... ..	A. J. W. Stephen ... ..	8	1	9	—
Todmorden ... ..	H. Thorp ... ..	15	2	17	2
Hebden Bridge ... ..	F. J. Dowdall ... ..	14	1	15	3
Mytholmroyd ... ..	S. T. Henderson ... ..	4	—	4	—

Name of Vaccination District.	Public Vaccinator.	Primary Vaccinations.			Re-vaccinations.
		Under 1 year.	1 year and upwards	Totals.	
Area No. 9.—Spen Valley.					
Liversedge ... ..	R. M. Beatty ... ..	25	—	25	2
Birstal ... ..	A. Dick ... ..	10	4	14	—
Gildersome ... ..	H. D. Merrington ... ..	—	—	—	—
Barley ... ..	H. Keighley ... ..	49	—	49	1
Heckmondwike ... ..	J. Ewing ... ..	16	1	17	—
Mirfield ... ..	J. E. H. West ... ..	28	—	28	—
Moric ... ..	W. S. Sykes ... ..	41	2	43	—
Birkenshaw ... ..	E. M. Whitehead ... ..	5	—	5	1
Ossett ... ..	W. L. R. Wood ... ..	9	—	9	1
Cleckheaton ... ..	A. L. Mitchell ... ..	7	—	7	1
Area No. 10.—Lower Agbrigg.					
Horbury ... ..	J. N. U. Russell ... ..	25	2	27	—
Normanton ... ..	N. S. Twist ... ..	61	2	63	2
Criggilestone ... ..	O. V. Burrows ... ..	49	—	49	3
Walton ... ..	D. Downie ... ..	8	—	8	—
Stanley ... ..	J. D. Bottomley ... ..	63	3	66	—
Emley ... ..	C. H. Smith ... ..	20	—	20	—
Crofton ... ..	T. E. Lister ... ..	24	—	24	—
Ardsley ... ..	T. Stephens ... ..	32	4	36	—
Rothwell ... ..	H. Stevenson ... ..	24	—	24	1
Oulton ... ..	C. H. Seville ... ..	22	1	23	—
Area. No. 11.—Osgoldcross.					
Heck ... ..	F. G. Creaser ... ..	9	—	9	—
Knottingley ... ..	J. Kehelly ... ..	76	1	77	1
Pontefract ... ..	G. Burnett ... ..	68	2	70	—
Methley ... ..	E. W. L. White ... ..	33	—	33	—
Featherstone ... ..	Wm. Steven ... ..	79	1	80	1
Castleford ... ..	J. J. W. Campbell ... ..	110	—	110	1
Brotherton ... ..	T. McCarthy ... ..	46	2	48	—
Kirkstemeaton ... ..	J. Malloch ... ..	13	—	13	—
South Elmsall ... ..	E. J. H. Sullivan ... ..	140	8	148	4
Ryhill ... ..	S. Hodgkinson ... ..	65	—	65	—
Brierley ... ..	J. L. Elliott ... ..	75	2	77	—
Great Houghton ... ..	J. W. Whitworth ... ..	10	—	10	—
Hemsworth ... ..	T. C. A. Sweetnam ... ..	71	1	72	2
Kinsley ... ..	M. B. Taylor ... ..	55	1	56	—
Ackworth ... ..	W. L. Gardner ... ..	13	2	15	—
Area No. 12.—Goole and Selby.					
Drax ... ..	F. G. Creaser ... ..	42	1	43	1
Selby ... ..	O. L. Scarborough ... ..	50	6	56	2
Snaith ... ..	F. G. Creaser ... ..	12	—	12	—
Swinefleet ... ..	W. Eardley ... ..	6	—	6	—
Goole ... ..	A. M. Erskine ... ..	30	—	30	1
Eastoft ... ..	J. C. T. Crowden ... ..	—	—	—	—
Area No. 13.—Don Valley.					
Bolton-on-Dearne ... ..	J. K. T. Mills ... ..	37	3	40	—
Mexborough ... ..	J. J. Huey ... ..	16	6	22	1
Tickhill ... ..	A. C. Lindsay ... ..	17	—	17	1
Bentley-with-Arksey ... ..	B. Lyons ... ..	46	11	57	—
Conisbrough ... ..	W. J. Maclure ... ..	203	7	210	4
Askern ... ..	J. Malloch ... ..	54	2	56	3
Adwick-le-Street ... ..	D. Malloch ... ..	76	1	77	3
Thurnscoe ... ..	F. J. Boyle ... ..	81	—	81	—
Brodsworth ... ..	R. B. Radcliffe ... ..	4	—	4	—
Armthorpe ... ..	H. F. Renton ... ..	49	1	50	—
Bawtry ... ..	W. F. Ward ... ..	58	2	60	—
Hatfield ... ..	C. D. Walker ... ..	39	—	39	—
Thorne ... ..	J. M. Taylor ... ..	62	3	65	1
Stainforth ... ..	R. M. L. Anderson ... ..	40	3	43	—
Area No. 14.—Staincross.					
Hoyland ... ..	H. R. L. Allott ... ..	37	—	37	3
Worsborough ... ..	H. A. L. Banham ... ..	45	—	45	1
Cudworth ... ..	J. L. Elliott ... ..	76	3	79	—
Darfield ... ..	J. W. Whitworth ... ..	6	1	7	—
Dodworth ... ..	J. Leishman ... ..	17	—	17	—
Darton ... ..	R. Millar ... ..	51	1	52	—
Wombwell ... ..	J. C. Pickup ... ..	44	—	44	3
Hoyland ... ..	H. N. Ritchie ... ..	41	2	43	1
Royston ... ..	H. B. Pare ... ..	34	1	35	—
Bradfield ... ..	J. A. R. Thompson ... ..	27	1	28	1
Stannington ... ..	N. MacPhail ... ..	8	—	8	—
Loxley ... ..	T. A. H. Smith ... ..	—	—	—	—
Chapelton ... ..	H. Sands ... ..	45	2	47	—
Grenoside ... ..	J. Smail ... ..	24	—	24	—
Stocksbridge ... ..	A. E. Goldie ... ..	25	—	25	—
Tankersley ... ..	H. Ritchie ... ..	—	—	—	—
Wortley ... ..	T. H. Easton ... ..	5	—	5	—
Silkstone ... ..	F. L. Whincup ... ..	14	2	16	—
Clayton West ... ..	R. Y. Farrer ... ..	3	—	3	—
Thurgoland ... ..	T. H. Easton ... ..	—	—	—	—
Penistone ... ..	A. A. Masser ... ..	26	3	29	1



Name of Vaccination District.	Public Vaccinator.	Primary Vaccinations.			Re-vacci- nations.
		Under 1 year.	1 year and upwards.	Totals.	
<i>Area No. 15.—Upper Agbrigg.</i>					
Kirkburton ... ..	J. A. Stephens ... ..	27	—	27	—
Skelmanthorpe ... ..	D. Bell ... ..	3	1	4	1
Shepley ... ..	M. M. Dey ... ..	13	1	14	—
Holmfirth ... ..	W. D. Galloway ... ..	12	—	12	—
Scholes ... ..	E. Trotter ... ..	19	—	19	1
Honley ... ..	W. H. Smailes ... ..	6	1	7	1
Meltham ... ..	P. MacGirr ... ..	7	2	9	—
Slaithwaite ... ..	R. N. Kirk ... ..	—	—	—	—
Golcar ... ..	S. Hall ... ..	32	2	34	—
Marsden ... ..	G. R. Aspinwall ... ..	18	4	22	—
Kirkheaton ... ..	S. Prior ... ..	4	1	5	—
Springhead ... ..	J. G. Oliver ... ..	8	—	8	—
Saddleworth ... ..	J. Loftus ... ..	5	1	6	—
<i>Area No. 16.—Rother Valley.</i>					
Brinsworth ... ..	R. G. Selby ... ..	39	—	39	—
Thurcroft ... ..	G. S. L. Kemp ... ..	30	—	30	2
Greasbrough ... ..	D. P. K. Jockel ... ..	2	—	2	—
Wentworth ... ..	H. M. Mills ... ..	5	—	5	1
Wath-on-Dearne ... ..	T. Crowley ... ..	14	—	14	—
Rawmarsh ... ..	D. P. K. Jockel ... ..	28	2	30	1
Maltby ... ..	W. L. Dibb ... ..	49	—	49	—
Swinton ... ..	C. J. H. Aitken ... ..	15	—	15	—
Thrybergh ... ..	G. H. Sedgwick ... ..	59	1	60	—
Harthill, Anston ... ..	J. N. Clark ... ..	41	1	42	—
		4307	212	4519	105

### Public Assistance Medical Services.

The Public Assistance Committee has given consideration to the rearrangement of districts covered by several of the District Medical Officers, particularly in the Don Valley, Rother Valley and Osgoldcross Areas, and it has been necessary to divide some of the districts and appoint additional D.M.O.'s. In other cases, to meet the requirements of the districts, additional branch surgeries have been provided within the D.M.O.'s areas so as to facilitate the work.

The excessive amount of unemployment of the last few years has continued and the problem of payment of D.M.O.'s on an equitable basis still gives rise to difficulties particularly in South Yorkshire where the closing of a colliery in any district will immediately increase considerably the amount of work thrown upon the D.M.O. The names of the D.M.O.'s will be found on pages 8 to 10 of this report.

The following tabular statement gives a summary of the number of "services" rendered during the year. An increase in the "total visits" from 118,984 in 1933, to 128,637 in 1934 is confined almost entirely to the Don and Rother Valley areas.

### Work of the Public Assistance District Medical Officers, 1934.

Guardians Committee Area.	Acreage.	Population. 1931 Census	No. of District Medical Officers.	No. of attendances on assisted persons.		
				At their homes.	At surgery.	Total Visits.
1. Ewecross ... ..	288079	23945	11	439	231	670
2. Staincliffe ... ..	159261	53717	8	3,038	1,313	4,351
3. Claro ... ..	213890	89250	13	2,488	1,435	3,923
4. Barkston Ash ... ..	143442	53541	9	2,421	1,235	3,656
5. Skyrack ... ..	64641	72343	5	960	804	1,764
6. Worth Valley ... ..	39443	81678	6	2,323	1,353	3,676
7. East Morley ... ..	12560	62862	8	757	632	1,389
8. Calder ... ..	78978	123722	14	2,729	1,979	4,708
9. Spen Valley ... ..	22177	137936	10	3,234	2,688	5,922
10. Lower Agbrigg ... ..	41345	93489	15	8,327	5,014	13,341
11. Osgoldcross ... ..	88853	157084	14	12,676	10,479	23,155
12. Goole and Selby ... ..	76299	45032	5	1,375	749	2,124
13. Don Valley ... ..	137061	178047	16	12,638	15,137	27,775
14. Staincross ... ..	117288	143786	19	5,365	5,241	10,606
15. Upper Agbrigg ... ..	78237	98558	17	2,540	1,461	4,001
16. Rother Valley ... ..	63504	115415	13	6,532	11,044	17,576
Totals ... ..	1625058	1530405	183	67,842	60,795	128,637

## Public Assistance Institutions.

The following tabular statements set out briefly the work undertaken in the sick and infirm wards of the County Public Assistance Institutions.

No change worthy of special note has taken place in the system of administration of the hospitals.

The prefatory letter to this report sets out shortly the action taken by a Composite Committee of certain standing Committees which has been set up with the object of deciding upon the most appropriate method of treatment of the sick in the future.

During the year progress was made at the Batley County Institution to increase the facilities for operative treatment and patients in need of surgical intervention have been transferred to that hospital or to the County Hospital at Wakefield for operation.

It is interesting to record that two blind masseurs have been given part-time employment at the County Institutions, chiefly at Batley and Pontefract.

The Saddleworth Institution was closed on 31/12/34, the patients being transferred to neighbouring institutions.

Four County Institutions are approved by the General Nursing Council as training schools for nurses. In these cases the surgical experience is amplified by an additional period of training in neighbouring voluntary hospitals, who co-operate with the County Public Assistance Committee in this matter.

	Able-bodied		Infirm.		Sick			Maternity	Mental		Receiving and isolation wards		Tuberculosis	Healthy Children	
	M.	F.	M.	F.	M.	F.	C.		M	F	M.	F.		Under 3 years	Over 3 years
Available accommodation	712	373	600	362	792	756	143	57	154	177	90	59	87	116	226
Beds occupied 31. 12. 34.	471	202	423	258	632	603	94	25	146	153	21	3	31	51	152

### BRIEF ANALYSIS OF CASES MAINTAINED DURING THE YEAR (EXCLUDING ABLE-BODIED AND CASUALS).

Type of Case.	Name of Institution.																				Total
	Settle	Skipton	Knarborough	Ripon	Great Ouseburn	Tadcaster	Wetherby	Otley	Keighley	Clayton	Todmorden	Staincliffe Batley	Wakefield	Pontefract	Hemsworth	Goole	Selby	Penistone	Grenoside	Saddleworth	
Sick (Acute and Chronic) ...	60	310	118	57	20	40	20	103	464	363	139	485	673	501	150	109	68	56	61	9	3806
Infirm ...	14	146	152	24	26	26	24	154	147	151	105	330	302	189	74	101	35	11	39	13	2063
Mental ...	41	16	4	6	—	—	—	10	158	95	6	122	35	57	14	15	7	4	32	3	625
Maternity ...	3	1	16	3	—	2	—	2	295	27	2	37	39	12	8	9	28	—	2	—	486
Other Cases ...	4	1	2	10	—	8	3	14	15	17	12	35	21	40	11	31	10	2	7	4	247
Totals ...	122	474	292	100	46	76	47	283	1079	653	264	1009	107	799	257	265	148	73	141	29	7227

### Number of Deaths.

Sick (Acute and Chronic) ...	7	63	52	10	—	2	6	29	98	39	42	143	121	67	29	15	11	8	1	3	746
Infirm ...	3	11	14	14	3	17	3	20	3	45	3	102	71	19	17	12	12	5	21	5	400
Mental ...	—	—	3	1	—	—	—	—	3	8	—	—	—	2	1	—	3	1	—	—	22
Maternity ...	—	—	1	—	—	—	—	—	9	—	—	—	—	1	—	—	1	—	—	—	12
Other Cases ...	—	1	2	—	—	—	1	—	1	6	—	3	3	3	1	3	3	—	—	—	27
Totals ...	10	75	72	25	3	19	10	49	114	98	45	248	195	92	48	30	30	14	22	8	1207

## PART II.

THE WORK OF THE BACTERIOLOGICAL  
LABORATORY.

DR. P. L. SUTHERLAND—Bacteriologist and Pathologist.

The Total number of specimens examined in the Laboratory during the year 1934, was 48,493.

This number includes 4,850 specimens received from the County Boroughs of Barnsley, Dewsbury, Halifax and Wakefield, the Ministry of Health, and from the Dewsbury and Heckmondwike Joint Waterworks Board.

The following table shows the number of specimens of different kinds examined during each month of the year.

Month	Serum Reaction for Enteric Fever.	Sputum for Tubercle Bacilli	Suspected Diphtheria	Venereal Disease	Miscel- laneous	Total
January ... ..	48	603	2,274	447	1,083	4,455
February ... ..	42	507	2,115	406	1,043	4,113
March ... ..	45	589	2,057	487	1,031	4,209
April ... ..	48	553	1,896	420	729	3,646
May ... ..	24	570	1,798	397	948	3,737
June ... ..	51	594	1,496	428	856	3,425
July ... ..	60	525	1,429	368	790	3,172
August ... ..	51	460	1,330	390	991	3,222
September ... ..	39	487	1,422	352	916	3,216
October ... ..	30	480	2,318	433	1,094	4,355
November ... ..	48	512	3,699	461	1,085	5,805
December ... ..	36	519	3,302	375	906	5,138
Total ... ..	522	6,399	25,136	4,964	11,472	48,493

The next table gives the figures for 1934 in comparison with those for the previous six years :—

Year.	Serum Reaction for Enteric Fever	Sputum for Tubercle Bacilli	Suspected Diphtheria	Venereal Disease	Miscel- laneous	Total
1928	1710	5552	9969	3746	4562	25539
1929	2115	5380	10934	3684	4898	27011
1930	1419	5722	13786	4028	5239	30194
1931	1080	5862	11323	3828	8319	30412
1932	1545	5983	14750	4132	11128	37538
1933	846	6423	15383	4532	10145	37329
1934	522	6399	25136	4964	11472	48493

## Examinations made for other Authorities.

The following table gives the number of examinations made for other authorities, exclusive of Venereal Diseases Examinations, which are given in detail on page 46.

## Examinations made for other Authorities.

Authority	No. of Specimens	Cost to Authority		
		£	s.	d.
Barnsley C.B. ... ..	146	72	11	6
Dewsbury C.B. ... ..	709	107	16	6
Halifax C.B. ... ..	11	3	7	6
Wakefield C.B. ... ..	2,209	301	14	0
Ministry of Health ... ..	32	7	4	0
Dewsbury and Heckmondwike Joint Waterworks Board ...	3	1	10	0
	3,110	494	3	6

## ENTERIC FEVER.

**Examination for Widal reaction.**—During the year, 522 specimens of blood were tested for the Widal reaction for the diagnosis of typhoid fever and paratyphoid fever. In each case the blood was tested against B. typhosus, B. paratyphosus A, and B. paratyphosus B. 23 specimens gave a positive agglutination with B. typhosus, 11 with B. paratyphosus A, and 14 with B. paratyphosus B.



It is to be noted however, that these results do not give a true indication of the relative proportion of cases of typhoid fever and of paratyphoid fever, as most of the samples of blood received at the laboratory are very small and are only suitable for the microscopic method of examination in one dilution. By this method, owing to cross agglutination, it is often impossible to distinguish between the two diseases.

When suitable samples of blood are sent, the test is performed by the macroscopic method which enables a reliable distinction to be made between these diseases.

**Examination for *B. typhosus* and *B. paratyphosus* A. and B.**—The number of specimens examined for organisms of the typhoid group was 426. These consisted chiefly of samples of urine and fæces from convalescent cases and from suspected "carriers." Of these, 1 specimen of fæces was found to contain *B. typhosus*, and 1 of urine and 3 of fæces were found to contain *B. paratyphosus* B.

### UNDULANT FEVER.

Three specimens of blood were examined for undulant fever with positive results in 2 cases.

### DYSENTERY.

During the year 28 specimens were examined for the dysentery bacillus. In two cases the dysentery bacillus (Flexner) was found. These were samples of fæces from Harrogate where there was a small outbreak early in December. In six cases the dysentery bacillus (Sonne) was found and these were from an outbreak in one family at Worsborough Dale late in December and one case proved fatal (Post Mortem No. 85).

### FOOD POISONING.

Thirty-four specimens were received during the year for examination for food poisoning organisms (18 fæces, 6 urines, 2 tins of crab, 2 samples of corned beef, 1 leg of mutton, 1 chocolate sponge roll, 1 specimen of blood, 1 "Savoury Duck," 1 suet roll and one sample of milk). In one specimen of fæces, the food poisoning organism, *B. Aertrycke*, was found. In 9 specimens of fæces, the "Savoury Duck" and the suet roll the food poisoning organism, *B. Gaertner*, was found. The majority of these specimens were received in connection with the outbreak of food poisoning at Maltby.

### HUMAN TUBERCULOSIS.

**Sputum.**—The specimens examined microscopically for the tubercle bacillus numbered 5,208 and in 1,035 or 19·8 per cent. the bacillus was found.

802 specimens which had been previously examined twice microscopically with negative result were re-examined by the sedimentation method, and 15 or 1·8 per cent. were found to be positive.

389 specimens which had been previously examined three times microscopically and once by sedimentation with negative result, were again re-examined by the sedimentation method, by culture and biologically. Of these, 22 or 5·6 per cent. were found by one or other, but chiefly by the biological method (inoculation test), to be positive.

By the sedimentation and biological methods 3·1 per cent. of specimens were found to be positive after two or three microscopic examinations had failed to show the presence of the tubercle bacillus.

**Urine.**—Of the 605 specimens of urine which were received for examination for various reasons, 196 were examined for tubercle bacilli to exclude the presence of tuberculosis of the bladder or kidney. Of these, 16 were found to contain *B. tuberculosis*.

**Other specimens.**—The remaining 106 specimens of human origin examined for the tubercle bacillus were pus 23, pleural fluids 38, fæces 7, cerebro-spinal fluids 36, fluid from knee 1 and gland 1. In 4 specimens of pus, 5 of pleural fluid, 7 of cerebro-spinal fluid and 1 of fæces, tubercle bacilli were found.

### BOVINE TUBERCULOSIS.

**Milk.—Veterinary Samples.**—1,465 specimens (1,078 from individual cows and 387 group samples) were examined. Of these, 73 from single cows or 6·7 per cent., and 48 group samples or 12·4 per cent. were found to contain the tubercle bacillus.

**Mixed Milks.**—During the year, samples of milk of all kinds were examined by the inoculation test for tubercle bacilli.

The specimens included samples of school milk and graded milk submitted by the central sanitary staff, samples from local sanitary inspectors and a few sent by the sanitary inspectors of other authorities, viz. Barnsley, Dewsbury and Wakefield County Boroughs.

The following table gives the result of the examination of these milks:—

**Mixed Milks Examined for B. Tuberculosis.**

Class of Milk	West Riding Administrative Area						Other Authorities			Total		
	Milk supplied to Schools.			Other Mixed Milks								
	No. Examined	Positive	% Positive	No. Examined	Positive	% Positive	No. Examined	Positive	% Positive	No. Examined	Positive	% Positive
Certified ...	9	—	—	27	3	11.1	3	—	—	39	3	7.6
Grade A 'T.T.'	2	—	—	12	2	16.6	2	—	—	16	2	12.5
Grade "A"	26	2	7.6	173	5	2.8	11	1	9.0	210	8	3.8
Pasteurised	60	2	3.3	20	—	—	23	1	4.3	103	3	2.9
Ordinary ...	297	10	3.3	1465	82	5.5	203	18	8.8	1965	110	5.5
	394	14	3.5	1697	92	5.4	242	20	8.2	2333	126	5.4

In addition 14 samples of dried milk were examined for tubercle with negative result in each case.

The total number of mixed milks examined was 2,333 and of these 126 or 5.4 per cent. were found to contain tubercle bacilli. It is to be noted that the designation "Certified," "Grade A. 'T.T.'," "Grade A" and "Pasteurised" does not offer any guarantee that the milk is free from tubercle bacilli.

Of the 14 positive school milks, one also failed to fulfil the requirements of the standard set as regards bacterial content.

In each case when a milk was found to be positive, immediate action was taken by the laboratory. A telephone message was sent to the Chief Veterinary Officer who at once instituted investigations for the detection and destruction of the tuberculous animal or animals.

As a result of investigations by the Chief Veterinary Officer, 62 cows were slaughtered during the year, while in 42 cases the offending animal could not be found.

In addition 13 positive results were referred to the Barnsley Medical Officer of Health, 5 to the East Riding County Medical Officer, 2 to the Keighley Medical Officer of Health, 2 to the Wakefield Medical Officer of Health, 1 to the Leeds Medical Officer of Health and 1 to the Lancashire County Medical Officer.

All milks submitted for examination for bacterial count have also been examined biologically for the presence of B. tuberculosis and it will be noted that an additional 988 have been examined by the biological method solely.

**EXAMINATION OF MILK FOR BACTERIAL CONTENT.**

1,345 specimens of milk were examined for bacterial content, and of these 339 or 25.2 per cent. were unsatisfactory.

These samples include the milk supplied to schools, designated milk, and milk sent by other Authorities.

The following table gives the details of examinations made:—

**Mixed Milks Examined for Bacterial Content.**

Designation	West Riding Administrative Area.						Other Authorities			Total		
	Supplied to Schools			Other								
	Total	Unsatisfactory		Total	Unsatisfactory		Total	Unsatisfactory		Total	Unsatisfactory	
		Number	Percentage		Number	Percentage		Number	Percentage		Number	Percentage
Certified ...	9	1	11.1	24	1	4.1	5	1	20.0	38	3	7.8
Grade A. 'T.T.'...	2	—	—	12	2	16.6	2	—	—	16	2	12.5
Grade "A" ...	26	2	7.6	173	18	10.4	11	—	—	210	20	9.5
Pasteurised ...	60	11	18.3	20	3	15.0	25	—	—	105	14	13.3
Ordinary ...	297	47	15.8	626	231	36.9	53	22	41.5	976	300	30.7
	394	61	15.4	855	255	29.8	96	23	23.9	1345	339	25.2

## WATER.

336 specimens of water were examined, of which 146 were pure, 151 polluted and 23 of doubtful purity. The remaining 16 were samples of bath waters.

During the year there has been an increase in the number of waters reported polluted. This is largely accounted for by the fact that the examinations since the beginning of July have been made according to the recommendations of the Ministry of Health as to method and standard. The standard is considerably higher than that previously applied. By the new method one examination is more comparable with another.

## DIPHTHERIA.

During the year, 25,136 swabs were examined for the diphtheria bacillus.

**Swabs for Diagnosis.**—The number of swabs submitted by practitioners for diagnosis was 6,288 of which 1,266 or 20·1 per cent. were positive.

**Swabs from convalescents.**—The number of swabs examined in order to determine if convalescents were free from infection and ready for discharge from isolation, was 14,847, and of these 2,772 or 18·6 per cent. were found to be positive. The swabs were received chiefly from the Medical Superintendents of Isolation Hospitals.

**Swabs from "contacts."**—The number of swabs from "contacts" was 4,001 of which 118, or 2·9 per cent were positive. The swabs were collected from persons, mostly children, known to have been in contact with cases of diphtheria from suspected "carriers," and from children attending schools where diphtheria was prevalent. These specimens were sent by local medical officers of health or collected by members of the central staff.

**Virulence tests.**—The total number of strains of diphtheria bacilli isolated and tested for virulence was 462. This test is carried out when doubtful diphtheria-like organisms are found in swabs from suspected cases and when the diphtheria bacillus persists for an unduly long period of time in the throats and nasal passages of convalescents.

In the case of "contact" swabs giving a positive routine result, the organism is—if it is possible—isolated in every case and tested for virulence. The results are given in the following table.

### Virulence Tests.

	Positive	Negative	Total
Cases for diagnosis ... ..	60	27	87
"Convalescents" ... ..	169	126	295
"Contacts" and "Carriers" ...	29	51	80
	258	204	462

The above strains were typed and classified as follows:—

Gravis ... ..	235
Mitis ... ..	20
Intermediate ... ..	3

As was the case last year a large majority belong to the "gravis" type of *B. Diphtheriæ* which is associated with a severe form of the disease.

## VENEREAL DISEASES.

The number of pathological examinations performed under the Public Health (Venereal Diseases) Regulations, 1916, was 4,964. Of these, 1,740 were made on behalf of the County Boroughs of Barnsley, Dewsbury, Doncaster, Halifax and Wakefield.

### Nature of Test.

District	Specimens examined for			Total	Cost to Authority		
	Spiro-chætes	Gonococci	Wasser-mann Reaction				
West Riding ... ..	1	952	2,271	3,224	£	s.	d.
Barnsley C.B. ... ..	—	—	5	5	1	15	0
Dewsbury C.B. ... ..	—	289	120	409	63	13	6
Doncaster C.B. ... ..	—	122	231	353	110	1	6
Halifax C.B. ... ..	—	6	510	516	179	14	6
Wakefield C.B. ... ..	2	138	317	457	144	5	6
	3	1,507	3,454	4,964	499	10	0



### CEREBRO-SPINAL FEVER.

116 specimens of cerebro-spinal fluid and 43 swabs were examined for the presence of meningococci. In 21 specimens of fluid the meningococcus was found which confirmed the diagnosis of cerebro-spinal fever. An endeavour was made to inoculate all the fluids which were negative as regards meningococci to exclude B tuberculosis. In 7 the tubercle bacillus was found, which proved that the disease was tuberculous meningitis, and in 88 the result was negative. 10 of the 21 positives were typed with the following result:—

Group I (epidemic type)	...	...	...	...	...	...	...	8
Group II (sporadic type)	...	...	...	...	...	...	...	—
Doubtful	...	...	...	...	...	...	...	2

The remaining 11 would not grow on culture.

### HUMAN ANTHRAX.

11 specimens were received during the year for examination for the anthrax bacillus. In 3 cases the result was positive. These positive specimens were from Mirfield, Batley and Ravensthorpe respectively, and in each case the patient was a wool worker.

### EXAMINATION OF WOOL FOR ANTHRAX.

During the year 36 samples of wool were received from the Government Wool Disinfecting Station at Liverpool, 14 and 7 in connection with the Mirfield and Ravensthorpe cases respectively (mentioned in the last paragraph), 6 relating to a case at Keighley and 9 to a case at Liversedge. In 3 of the Ravensthorpe wools the organism was found, viz:—

A blend of 60% East Indian Wool and 40% English wool.

An East Indian Vicanere.

An East Indian Kandahar.

### RINGWORM.

The number of specimens of hairs and scales examined was 193, and 82 or 42·4 per cent. gave a positive result.

### OPHTHALMIA NEONATORUM.

16 specimens of pus from the eyes of infants suffering from ophthalmia, suspected to be of gonorrhœal origin, were examined, 4 of which proved positive.

### CYTOLOGICAL EXAMINATIONS.

181 examinations were made including examination of blood films and determination of the number of white cells, red cells and hæmoglobin.

### SILICOSIS.

Material from 14 post-mortem examinations was examined from suspected cases of silicosis. The lungs were examined by the naked eye, microscopically and chemically. 4 showed definite silicosis and tuberculosis and 10 showed silicosis. Chemical examination showed that the ash of the lungs contained silica to the extent of 1·03, 0·76, 0·38, 0·39, 2·10, 2·90, 0·10, 2·02, 0·416, 2·08, 6·56, 0·34, 0·336, 1·536 per cent. of dried lung.

### BIO-CHEMICAL EXAMINATIONS.

During the year 224 bio-chemical examinations were made, particulars of which are as follows:—blood sugar 60, urines for urea 60, blood urea 39, urines for sugar 21, urines for acetone 15, cerebro-spinal fluids for chloride content 11, fæces for occult blood 8, urines for chloride 3, urines for lead 2, Rehfuss test meal 3, vomit 1, and stone from right kidney for classification 1.

### VACCINES.

During the year 10 vaccines were prepared, mainly from specimens of sputum.

### ZONDEK ASCHEIM TESTS.

Five specimens of urine were received during the year for the Zondek Ascheim test; 4 of these proved positive.

## TISSUE FOR HISTOLOGICAL EXAMINATIONS.

290 specimens of tissue were examined histologically, chiefly to determine the presence or absence of cancer, and the results are given below :—

## Histological Specimens.

Source.	Number examined.	Found Cancerous	Other Conditions
HUMAN			
Tumour from breast ... ..	12	8	4 Simple
Cervix ... ..	7	5	2 "
Spleen ... ..	1	—	1 "
Tumour of tonsil ... ..	1	1	
Mass from anal region ... ..	1	—	1 "
Gastric ulcer ... ..	1	—	1 "
Sinus from face ... ..	1	—	1 Sarcoma
Tissue from labia minora ... ..	1	1	
Glands from neck ... ..	1	—	1 Hodgkins disease
Growth from nose ... ..	2	—	2 Simple
Specimen passed per vagina ... ..	1	—	1 "
Cervical polyp ... ..	1	—	1 "
Uterus ... ..	5	2	3 "
Mass from pre-patellar bursa ... ..	1	—	1 "
Uterine contents ... ..	1	—	1 "
Tumour from sub-cutaneous tissue from left			
pectoralis major ... ..	1	1	
Tumour from scrotum ... ..	1	1	
Tumour from both ovaries ... ..	1	—	1 "
Ulcer of leg ... ..	1	—	1 "
Cyst of ovary ... ..	2	—	2 "
Supra clavicular gland ... ..	1	1	
Tumour from forehead ... ..	1	—	1 Tuberculous
Tumour from mouth ... ..	2	1	1 Sarcoma
Femur ... ..	2	1	1 "
Tissue from lip ... ..	1	—	1 Simple
Fibroma from left popliteal space ... ..	1	—	1 "
Glands from axilla ... ..	1	—	1 "
Glands from abdomen ... ..	2	—	2 "
Glands from broad ligament ... ..	1	—	1 Tuberculous
Cervical gland ... ..	1	—	1 "
Prostate ... ..	2	1	1 Simple
Cyst ... ..	1	—	1 "
Cyst from broad ligament ... ..	1	—	1 "
Tumour ... ..	1	—	1 Myxo Sarcoma
Tumour from axilla ... ..	2	2	
Tumour from tongue ... ..	1	—	1 Simple
Tumour from shoulder ... ..	1	—	1 Pigmented mole
Tissue from pleural cavity ... ..	1	—	1 Simple
Tissue from cheek ... ..	1	—	1 "
Growth from bladder ... ..	1	1	
Growth from thumb ... ..	1	—	1 "
Growth from roof of mouth ... ..	1	—	1 Fibroma
MEDICO LEGAL ... ..	205	—	

## Animal Tissue for Tuberculosis.

	Number examined	Found Tuberculous	Other Conditions
BOVINE			
Ox tongue ... ..	1	—	
Udder ... ..	7	—	
Glands ... ..	6	—	
OTHER			
Intestine from pig ... ..	1	—	

# POST-MORTEM EXAMINATIONS AND INQUESTS.

During the year 87 examinations were made by Dr. Sutherland at the request of West Riding Coroners and evidence was given at 69 inquests. The examinations included those in connection with 6 cases of murder or suspected murder, 2 of manslaughter, and 1 of suicide.

The verdicts show the variety of causes of death:—

No.	Sex.	Age	
1	M.	13	Accidental death due to explosion.
2	M.	67	Silicosis.
3	M.	56	Suspected tetanus.
4	M.	68	Shock from strangulated inguinal hernia, operation and shock.
5	M.	25	Chronic valvular heart disease. Mitral obstruction.
6	M.	21	Shock from operation for nephro-lithiasis.
7	M.	19	Diabetes.
8	M.	38	Cerebral hæmorrhage.
9	M.	New born	Inattention at birth.
10	M.	50	Lobar pneumonia.
11	M.	37	Acute lobar pneumonia.
12	F.	New born	Asphyxia.
13	F.	2	Fracture of skull and laceration of brain due to fall from train (suspected murder).
14	F.	?	Fracture of skull and laceration of brain due to motor accident (? manslaughter).
15	F.	27	Suspected criminal abortion.
16	M.	56	Silicosis.
17	M.	60	Fracture of skull.
18	M.	26	Asphyxiation by firedamp.
19	F.	4/12	Bronchitis.
20	F.	New born	Hæmorrhage from umbilicus.
21	F.	?	Suspected criminal abortion.
22	M.	66	Suspected silicosis.
23	M.	56	Coronary artery disease.
24	M.	61	Silicosis.
25	M.	New born	Congenital heart disease.
26	F.	New born	Congenital intestinal obstruction.
27	F.	30	Strangulation by scarf (murder).
28	M.	28	Gunshot wound right shoulder (murder).
29	F.	New born	Asphyxia due to overlaying.
30	M.	54	Silicosis.
31	M.	46	Silicosis.
32	F.	21	Shock from abortion and operation.
33	M.	14 days	Malnutrition. Specific.
34		New born	Death due to cerebral hæmorrhage due to injury to head. Suspected murder.
35	M.	6/12	Congenital heart disease and bronchitis.
36	F.	27	Toxæmia of pregnancy and abortion.
37	M.	46	Septicæmia contributed to by accident.
38	M.	59	Silicosis.
39	M.	?	Food poisoning. <i>B. aertrycke</i> .
40	F.	28	Death due to prolonged labour, shock of operation and anæsthetic.
41	M.	?	Drowning. Cut throat. Suicide.
42	?	New born	Strangulation. Murder.
43	M.	New born	Cerebral hæmorrhage caused during labour.
44	M.	28	Suffocation by fire damp.
45	M.	22	Acute general peritonitis following intestinal rupture.
46	M.	58	Death following injury to spinal cord.
47	M.	22	Asphyxia; cause unknown, possibly epilepsy.
48	M.	63	Silicosis and pericarditis.
49	M.	24	Cerebral embolism.
50	M.	49	Tuberculosis and silicosis.
51	F.	15 weeks	Asphyxia due to regurgitation of vomit.
52	M.	28	Fracture of base of skull. Run over by motor car.
53	M.	5/12	Marasmus due to inability to take food.
54	M.	33	Fracture of base and vault of skull and laceration of brain. ? Mental.
55	F.	11	Meningitis.
56	F.	17	Death due to shock of operation and anæsthetic accelerated by pleural and other adhesions.
57	M.	34	Cellulitis of thigh and leg.
58	M.	5	Meningitis.
59	M.	50	Death from sepsis following fracture of spine.
60	M.	13	Eczema and chronic bronchitis.
61	F.	62	Goitre and myocarditis.
62	M.	49	Arterio-sclerosis.
63	F.	4 days	Toxic jaundice of the newly born.
64	F.	4 days	Toxic jaundice of the newly born.
65	F.	28	Suspected criminal abortion.
66	M.	49	Rupture of tuberculous ulcer of intestine following tuberculosis of lung predisposed to by silicosis.
67	F.	New born	Still born.
68	M.	62	Chronic nephritis. Acute enteritis.
69	M.	42	Electrocution.
70	F.	36	Enteritis.
71	F.	34	Oxalic acid poisoning.
72	M.	68	Silicosis.
73	M.	7 days	Hæmorrhage from bowel. Hæmophilia.
74	F.	43	Carcinoma of lung.
75	M.	1 day	Hæmorrhage under scalp and into the cranium. Prolonged labour.
76	M.	56	Silicosis.
77	F.	12 days	Purpura.
78	?	New born	Suspected murder.
79	M.	40	Ulcerative enteritis. Sepsis.
80	F.	10	Diphtheria.
81	M.	57	Silicosis and tuberculosis.
82	M.	60	Silicosis and tuberculosis.
83	M.	4 days	Convulsions. Cerebral hæmorrhage.
84	M.	14	Manslaughter.
85	F.	10	Sonne dysentery.
86	M.	50	Pericarditis. Nephritis.
87	F.	50	Death from drowning.



## EXAMINATIONS MADE FOR THE WEST RIDING POLICE.

5 examinations were made for the West Riding Police. 4 examinations were of clothing, etc. in connection with cases of alleged criminal assault, while the remaining examination was of bones found after a hay-rick fire to determine whether human or otherwise.

## BIOLOGICAL EXAMINATIONS.

During the year 5,095 specimens were examined biologically involving the use of 10,120 animals (guinea-pigs) for diagnostic purposes. The tests were simple subcutaneous inoculations for the detection of tubercle bacilli in milk, sputum, urine and other materials, for the determination of the virulence of *B. diphtheriæ* and for the detection of anthrax bacilli.

These tests were made not only for the West Riding County Council but also on behalf of the County boroughs of Barnsley, Dewsbury, Halifax, Wakefield and the Government Wool Disinfecting Station at Liverpool.

## List of Sanitary Districts in the West Riding showing the Number of Specimens Received from each during 1934.

<i>Urban Districts.</i>		<i>Urban Districts.</i>		<i>Urban Districts.</i>	
Adwick-le-Street ... ..	70	Kirkheaton ... ..	14	Wath-upon-Deane ... ..	159
Altofts ... ..	74	Knaresborough ... ..	18	Whitley Upper ... ..	2
Ardsley, East and West ...	19	Knottingley ... ..	20	Whitwood ... ..	17
Baildon ... ..	15	Lepton ... ..	15	Wombwell ... ..	298
Barkisland ... ..	2	Linthwaite ... ..	39	Worsborough ... ..	74
Barnoldswick ... ..	81	Luddendenfoot ... ..	13	Yeadon ... ..	14
Batley B. ... ..	1,138	Maltby ... ..	103		
Bentley-with-Arksey ... ..	97	Marsden ... ..	29	<i>Rural Districts.</i>	
Bingley ... ..	559	Meltham ... ..	21	Barnsley ... ..	165
Birkenshaw ... ..	4	Methley ... ..	31	Bishopthorpe ... ..	5
Birstall ... ..	11	Mexborough ... ..	37	Bowland ... ..	28
Bolton-upon-Deane ... ..	112	Midgley ... ..	1	Doncaster ... ..	161
Brighouse B. ... ..	218	Mirfield ... ..	229	Goole ... ..	43
Burley-in-Wharfedale ...	11	Morley B. ... ..	529	Great Ouseburn ... ..	251
Calverley ... ..	33	Mytholmroyd ... ..	20	Halifax ... ..	28
Castleford ... ..	158	New Mill ... ..	43	Hemsworth ... ..	364
Clayton West ... ..	11	Normanton ... ..	165	Hunslet ... ..	37
Conisbrough ... ..	47	Oakworth ... ..	17	Keighley ... ..	244
Cudworth ... ..	48	Ossett B. ... ..	256	Kiveton Park ... ..	43
Darfield ... ..	118	Otley ... ..	84	Knaresborough ... ..	4
Darton ... ..	61	Oxenhope ... ..	3	Pateley Bridge ... ..	58
Denby and Cumberworth ...	33	Penistone ... ..	11	Penistone ... ..	8
Denholme ... ..	7	Pontefract B. ... ..	141	Pontefract ... ..	77
Dodworth ... ..	15	Pudsey B. ... ..	41	Ripon ... ..	3
Drighlington ... ..	14	Queensbury ... ..	41	Rotherham ... ..	202
Earby ... ..	24	Rawdon ... ..	20	Sedburgh ... ..	31
Elland ... ..	34	Rawmarsh ... ..	35	Selby ... ..	9
Emley ... ..	3	Ripon C. ... ..	40	Settle ... ..	108
Farsley ... ..	65	Rishworth ... ..	17	Skipton ... ..	79
Featherstone ... ..	119	Rothwell ... ..	47	Tadcaster ... ..	135
Flockton ... ..	—	Royston ... ..	20	Thorne ... ..	75
Garforth ... ..	15	Saddleworth ... ..	82	Todmorden ... ..	23
Gildersome ... ..	1	Scammonden ... ..	9	Wakefield ... ..	311
Golcar ... ..	39	Selby ... ..	41	Wetherby ... ..	155
Goole B. ... ..	173	Shelf ... ..	5	Wharfedale ... ..	354
Greasbrough ... ..	3	Shelley ... ..	2	Wortley ... ..	139
Greetland ... ..	21	Shepley ... ..	8		
Guiseley ... ..	16	Shipley ... ..	69	<i>County Boroughs:—</i>	
Gunthwaite and		Silsden ... ..	5	Barnsley ... ..	146
Ingbirchworth ... ..	—	Skelmanthorpe ... ..	7	Dewsbury ... ..	709
Harrogate B. ... ..	164	Skipton ... ..	57	Halifax ... ..	11
Haworth ... ..	30	Slaithwaite ... ..	17	Wakefield ... ..	2,209
Hebden Bridge ... ..	70	South Crossland ... ..	6	<i>Hospitals, etc. ... ..</i>	<i>20,318</i>
Heckmondwike ... ..	114	Southowram ... ..	4	<i>School Medical Inspection</i>	
Hemsworth ... ..	149	Sowerby ... ..	36	<i>and Child Welfare Staff</i>	<i>328</i>
Hipperholme ... ..	23	Soyland ... ..	3	<i>County Sanitary Inspectors</i>	
Holme ... ..	18	Spenborough ... ..	142	<i>Tuberculosis Staff ... ..</i>	<i>4 448</i>
Holmfirth ... ..	225	Springhead ... ..	2	<i>Ministry of Health ... ..</i>	<i>32</i>
Honley ... ..	50	Stainland-with-Old Lindley	10	<i>Venereal Specimens ... ..</i>	<i>4,964</i>
Horbury ... ..	53	Stanley ... ..	286	<i>Specimens from Chief</i>	
Horsforth ... ..	103	Stocksbridge ... ..	37	<i>Veterinary Officer and</i>	
Hoyland Nether ... ..	221	Swinton ... ..	39	<i>Staff ... ..</i>	<i>1,498</i>
Hoylandswaine ... ..	1	Thurlstone ... ..	6	<i>Government Wool Disin-</i>	
Hunsworth ... ..	1	Thurnscoe ... ..	60	<i>fecting Station, Liverpool</i>	<i>36</i>
Ilkley ... ..	90	Thurstonland and Farnley		<i>Staff Appointments ... ..</i>	<i>73</i>
Keighley B. ... ..	918	Tvas ... ..	24	<i>Total No. of Specimens</i>	
Kirkburton ... ..	4	Tickhill ... ..	9	<i>examined bacteriologic-</i>	
		Todmorden B. ... ..	102	<i>ally ... ..</i>	<i>48,493</i>

## PART III.

### MATERNITY AND CHILD WELFARE.

DR. R. LAWRENCE.—Chief Assistant Medical Officer for Child Welfare and School Medical Inspection.

#### Statistics, 1934.

	Whole of Administrative County.	County Council's Maternity and Child Welfare Area.
Estimated Population, 1934 ... ..	1,534,900	1,040,776
No. of Live Births (registered) ... ..	23,393	16,082
No. of Illegitimate Births ... ..	890	609
No. of Stillbirths ... ..	1,183	764
Birth Rate ... ..	15.2	15.5
Deaths under one year ... ..	1,347	933
Infantile Mortality Rate ... ..	58	58
<i>*Infantile Mortality Rate, average for 10 years, 1924-33</i>	75	73
Notified cases of Ophthalmia Neonatorum ... ..	105	65
Notified cases of Puerperal Fever ... ..	62	39
Notified cases of Puerperal Pyrexia ... ..	172	127
Maternal deaths from Sepsis ... ..	54	40
Maternal deaths from Other Causes ... ..	82	53
Maternal Mortality Rate (Per 1,000 Live and Still births)	5.53	5.52
„ „ „ (Per 1,000 Live births) ...	5.81	5.78
<i>*Maternal Mortality Rate, average for 10 years, 1924-33.</i>	5.35	5.32

\* Per 1,000 live births.

#### Midwives Acts, 1902 to 1926.

The County Council is the Local Supervising Authority under the Midwives Acts for the Administrative County.

The midwives who notified their intention to practise during 1934 number 618, classified as follows:—

Total Number of Midwives.	Trained.		Untrained or Bona-fide
	Attached to District Nursing Associations.	Independent.	
618	190	405	23
	595		

The supervision is carried out by the County Medical Officer, his Assistants and two Inspectresses. Health Visitors make visits to the midwives and inspect their registers, books of forms and their bags. During the year, 755 visits of inspection were made. Two midwives were cautioned by the County Medical Officer for minor infringements of the Rules; two midwives died; and two resigned from the roll of midwives.

#### MIDWIFERY.

##### Number of births attended by Certified Midwives.

Midwives attended 15,534 births and 2,302 cases of confinement as Maternity Nurses, out of a total of 24,576 live and still births registered, or 72.5 per cent.

The following table shows the number of births attended by midwives, and the percentage to the total births registered, compared with the previous years:—

Year.	Births attended by midwives.	Total Births registered in County Area.			Percentage attended by midwives.
		Live	Still	Total	
1930	17,067	25,935	1,222	27,157	62.8
1931	17,480	24,900	1,179	26,079	67.0
1932	17,198	24,319	1,239	25,558	67.2
1933	17,284	23,084	1,143	24,227	71.3
1934	17,836	23,393	1,183	24,576	72.5

The number of cases attended by individual midwives was as follows:—

Independent Midwives.	Midwives employed in Institutions.	Midwives employed by Nursing Associations.	Cases.
—	—	—	200 or over
6	—	—	150 to 200
18	—	—	100 to 150
74	10	9	50 to 100
232	71	160	under 50
15	3	1	Nil. returns.
345	84	170	

In 19 cases no returns were made owing to deaths of midwives, resignations, midwives taking temporary duties only, and removal of midwives from the area.

#### Midwives' Fees—Necessitous Cases.

Under the County Council's scheme for contributing to the payment of midwifery fees in necessitous cases the sum of £3,147 0s. 0d. was paid to midwives in respect of 3,095 patients.

#### Medical Help Records.

The following table summarises the records received from midwives during the year 1934 and compares them with similar records for previous years:—

	1931	1932	1933	1934
Records of sending for Medical help ... ..	5,714	5,855	5,953	6,385
Deaths of (a) Mother ... ..	27	11	17	14
(b) Child ... ..	133	149	123	126
Still-births (a) Males ... ..	175	192	159	180
(b) Females ... ..	168	166	163	147
Laying out the dead ... ..	44	35	27	35
Liability to be a source of infection ... ..	125	117	107	157
Substitution of artificial feeding for breast-feeding ...	106	139	174	189

The number of copy medical help records received from midwives during the year was 6,385 or 35·8 per cent. of the cases attended.

The following table shows the nature of the cases in which medical help was sought, classified according to the Rules of the Central Midwives Board:—

#### RULE E 21(1).

Death of Mother ... .. 0

Death of Baby ... .. 3

#### RULE E.21(2)—PREGNANCY.

Ante-partum Hæmorrhage ... 254  
Abortion or Miscarriage ... 190  
Threatened Abortion ... 212  
Eclampsia ... .. 19  
Albuminuria ... .. 156  
Pseudo-cyesis ... .. 2  
Pyelitis ... .. 17

Post Maturity ... .. 8  
Oedema ... .. 77  
Ante-natal Examination ... 144  
Purulent Discharge ... .. 13  
Varicose Veins ... .. 44  
Chorea ... .. 1  
Hæmorrhoids ... .. 4  
Prolapse ... .. 3

Toxæmia ... .. 9  
Hydramnios ... .. 7  
Miscellaneous ... .. 235  
Hyperemesis ... .. 55  
Cerebral Embolism ... .. 1  
Contracted Pelvis ... .. 35  
Insanity ... .. 1

#### RULE E.21(3)—LABOUR.

Adherent Placenta ... .. 88  
Retained Placenta or  
  Membrane ... .. 81  
Placenta Prævia ... .. 46  
Ruptured Perineum ... 1,219  
Prolonged Labour ... .. 723  
Obstructed Labour ... .. 167  
Precipitate Labour ... .. 9  
Uterine Inertia ... .. 231  
Laceration of Cervix ... .. 6

Hydramnios ... .. 9  
Contracted Pelvis ... .. 58  
Rigid Os ... .. 54  
Collapse ... .. 84  
Breech Presentation ... 127  
Undefined do. ... .. 46  
Transverse do. ... .. 26  
Funis do. ... .. 29  
Face do. ... .. 22  
Hand do. ... .. 8

Foot Presentation ... .. 21  
Occipito-Posterior  
  Presentation ... .. 127  
Eclampsia ... .. 17  
Miscellaneous ... .. 104  
Prolapse ... .. 4  
Albuminuria ... .. 14  
Foetal Distress ... .. 30  
Debility ... .. 48  
Rigor ... .. 2

#### RULE E.21(4)—LYING-IN.

Post-partum Hæmorrhage ... 120  
White Leg ... .. 3  
Purulent Discharge ... .. 8  
Oedema ... .. 2  
Pyelitis ... .. 6

Miscellaneous ... .. 105  
Phlebitis ... .. 12  
Eclampsia ... .. 5  
Debility ... .. 45  
Varicosity ... .. 15  
Post-natal Examination ... 2

Pyrexia ... .. 134  
Mastitis ... .. 25  
Rigor ... .. 9  
Albuminuria ... .. 2  
Sub-involution of Uterus ... 9  
Collapse ... .. 3

#### RULE E.21(5)—THE CHILD.

Injuries at Birth ... .. 1  
Twins and Triplets ... .. 29  
Other Malformations ... .. 43  
Pemphigus ... .. 11  
Convulsions ... .. 21  
Dangerous Feebleness ... 238  
Talipes ... .. 12  
Imperforate anus ... .. 3

Unsatisfactory umbilicus ... 14  
Icterus Neonatorum ... .. 30  
Miscellaneous ... .. 22  
Hare Lip and Cleft Palate ... 11  
Spina Bifida ... .. 27  
Still-birth ... .. 64  
Melaena ... .. 13

Tongue Tied ... .. 16  
Inflammation of Eyes ... 224  
Prematurity ... .. 96  
Phimosis ... .. 48  
Rash ... .. 19  
Hæmorrhage from mouth ... 4  
Asphyxia ... .. 40  
Persistent Caput ... .. 4



### Doctors' Fees in Emergency Cases.

The claims paid to doctors for their attendance upon cases of emergency under the Midwives Act, 1918, amounted to £8,467 5s. 2d.

### Still-Births.

The number of still-births notified by midwives was 337 or 1·89 per cent. of the total births attended by them.

The following table gives the number of still-births attended by midwives, and the percentage to total births attended by them, compared with previous years:—

Year	Number of Births attended by Midwives	Number of Still-births notified.	Percentage of Still-births to Births attended
1929	17,509	347	1·98
1930	17,067	320	1·87
1931	17,480	343	1·96
1932	17,198	358	2·08
1933	17,284	322	1·86
1934	17,836	337	1·89

### Liability to be a Source of Infection.

The number of notifications of liability to be a source of infection received from midwives was 157 compared with 107 for the previous year.

The following table shows the cases of infection with which midwives came into contact:—

Puerperal Fever and Pyrexia	...	...	...	...	...	...	101
Scarlet Fever	...	...	...	...	...	...	17
Diphtheria	...	...	...	...	...	...	12
Pemphigus Neonatorum	...	...	...	...	...	...	17
Other cases of Infection	...	...	...	...	...	...	10
							157

During the year two midwives were suspended from midwifery practice for a period exceeding 24 hours owing to contact with cases of infectious disease.

The sum of £3 3s. 0d. was paid to four midwives for loss of cases during suspension for the purpose of disinfection after being in contact with cases of infection.

### Training of Midwives.

At the present time the County Council are not training midwives, but in accordance with Circular 559 of the Ministry of Health, dated the 27th February, 1925, the sum of £90 0s. 0d. was paid to the West Riding County Nursing Association for the provision of newly trained nurse midwives to serve the areas of Mirfield Urban District and Hartshead and Clifton (Halifax R.D.) and Monk Fryston (Pontefract R.D.).

### Compensation to Midwives.

The Ministry of Health have approved a scheme for the payment of compensation to midwives, whose patients, after being referred to an ante-natal clinic of the County Council, had, for medical reasons been admitted to a maternity home, and in cases where a midwife had called in a medical practitioner in accordance with the Rules of the Central Midwives Board, and the patient had been sent to a maternity hospital by such medical practitioner. A fee of 15/- per case was approved.

The sum of £259 10s. 0d. was paid in respect of 346 patients who were removed into hospital.

### THE PUBLIC HEALTH (NOTIFICATION OF PUERPERAL FEVER AND PUERPERAL PYREXIA) REGULATIONS, 1926.

The following table gives the special services provided by the County Council under the above Regulations, together with the cost of such services to the County Council.

	Cases	Amount		
		£	s.	d.
Hospital Treatment	107	1,816	17	3
Ambulance Charges (11 cases)	—	12	9	6
Domiciliary Nurse	—	—	—	—
*Consultant Obstetrician (18 cases)	9	93	19	0
	116	1,923	5	9

\*Consultant Obstetricians were requested in 18 cases, and 9 of these patients were removed into hospital, and are included in the hospital cases.

### Ophthalmia Neonatorum.

The following table shows the number of cases of ophthalmia neonatorum reported in the whole of the Administrative County during the last three years:—

1932	1933	1934
101	87	105

The details of the cases reported upon in the County Notification of Births Area, in accordance with the instructions issued by the Ministry of Health (Circular 648, p. 12) are shown in the following table:—

Cases.			Vision Unimpaired.	Vision Impaired.	Total Blindness.	Deaths.
Notified.	Treated.					
	At Home.	In Hospital.				
70	56	14	68	—	—	2

#### PREVENTIVE MEASURES.

All practising midwives are supplied free of charge by the County Council with "Collosol Argentum" and instructed to instil two drops into each eye immediately at birth. 72·5% of the confinements in the County are attended by midwives.

In 1922 the number of notified cases of ophthalmia neonatorum was 198. In 1923 the first issue of Collosol Argentum was made, and the number of notified cases fell to 105 in 1934.

#### TREATMENT.

All cases notified in the County Maternity and Child Welfare area where not admitted to hospital are under the supervision of the County Council's Health Visitors and the termination of all cases is reported to the County Medical Officer.

The County Council has provided hospital facilities for the treatment of this disease and if necessary arrangements can be made for the mother to accompany the baby in cases where the child is breast fed. The majority of cases are treated in general hospitals and in other hospital cases the fees paid by the County Council vary from £1 1s. 0d. to £3 3s. 0d. per week plus extra fees when the mother accompanies the baby.

### THIRD REVISION COURSE FOR MIDWIVES.

#### Bingley Training College.

The Third Revision Course for Midwives took place at the Bingley Training College from the 16th to 21st April. The syllabus of lectures had been arranged to include as many practical aspects of midwifery as possible, and was as follows:—

Subject.	Lecturer.
Inaugural Address.	
1. Pregnancy and Labour in Association with Organic Heart Disease.	Rhoda H. B. Adamson, M.D., B.S., F.C.O.G., Lecturer in Midwifery, University of Leeds; Hon. Obstetric Surgeon, Leeds Maternity Hospital.
2. Recent Advances in Midwifery.	Elizabeth D. Hunter Craig, M.B., Ch.B., L.M., formerly R.M.O., York Maternity Hospital.
3. Toxæmias of Pregnancy.	F. J. Browne, Esq., D.Sc., M.D., F.R.C.S.(E.), F.C.O.G., Professor of Obstetrical Medicine, University of London.
4. Other Common Difficulties in Ante-Natal Work.	
5. Shock and Abortion.	Reginald Lawrence, Esq., M.D., Ch.B., D.P.H., Assistant Medical Officer, West Riding County Council.
6. The Anatomy and Physiology of Normal Labour.	R. A. Brews, Esq., M.D., M.S. (Lond.), M.R.C.P., F.R.C.S., Assistant Obstetrician, London Hospital; Assistant Obstetrical and Gynæcological Surgeon, Queen Mary's Hospital for the East End.
7. Prolonged Labour as encountered by Midwives.	
8. Puerperal Pyrexias.	W. Moir Shepherd, Esq., M.D., Ch.B., F.R.C.S., Hon. Surgeon, Royal Infirmary, Doncaster, Consulting Gynæcologist, West Riding and Lindsey County Councils.
9. Remedial Exercises during Pregnancy and the Puerperium.	Miss M. Randell, S.R.N., Sister, St. Thomas's Hospital, London, S.E.1.
10. The Menopause.	Ruth Nicholson, M.B., M.S. (Durham), D.P.H., F.C.O.G., Hon. Surgeon, Liverpool Maternity Hospital.
11. Venereal Diseases in Women and Children.	

The Course was attended by 135 midwives in residence and an average of 20 outside students attended daily. The Course was very successful and judging from the numerous questions asked, the lectures were followed keenly and intelligently.

The possibility of holding such a course was due in a large measure to the willingness and co-operation of the County Council's Health Visitors in undertaking midwifery duties. The following is a summary of the work done by the Health Visitors:—

Cases delivered	...	...	...	...	...	23
Nursing cases taken over	...	...	...	...	...	43
Total visits made	...	...	...	...	...	253



There were 10 midwives from outside the County Council's area in residence as follows :—

2 Barnsley C.B.	2 North Riding County Council.
1 Bradford C.B.	2 Durham County Council.
1 Grimsby C.B.	1 Westmorland County Council.
1 Stockton-on-Tees C.B.	

and in addition 3 midwives from Burnley C.B. (Lancs.) attended several lectures.

County Alderman Probert welcomed the students in an opening address in which he traversed the problems of midwifery in relation to maternal mortality and the activities of the Public Health Department generally. References to the development of Ante-natal work and the schemes to combat maternal mortality were followed by a discussion as to the physical capacity of the modern woman to go through the process of childbirth scathlessly and with comparative absence of discomfort.

The technical work of the Course began almost immediately afterwards with a lecture by Dr. Rhoda Adamson on Pregnancy and Labour in Association with Organic Heart Disease. She began by outlining the changes in the female physiology in response to the additional work demanded for the discharge of child bearing—thus providing as it were a datum line from which all other observations should be made. She then proceeded to outline the course of events in the case of patients already handicapped by organic heart disease and pointed out the “danger signals.” She ended by emphasising the importance of breast feeding not only for the baby but conducing to the successful involution of organ to their normal condition.

Dr. Elizabeth Hunter Craig, formerly resident Medical Officer of the York Maternity Hospital, ranged over a considerable area in justification of her title “Recent Advances in Midwifery,” and although her subject was so wide, she was successful in discussing lucidly and easily many obstetrical difficulties which the midwife meets.

We drew on the Metropolis for the next two lecturers. Professor F. J. Browne of the University of London was invited to lecture on the Toxæmias of Pregnancy. This is a subject of which he is a research worker and his discourse was excellent. He emphasised his belief that rise of blood pressure was an early sign of toxæmia, and albuminuria a late sign due to damage of the kidney. As a consequence the midwives asked for facilities to be taught the use of a sphygmomanometer for estimating blood pressure.

His second lecture consisted of subjects which he selected himself for their intrinsic interest—excessive vomiting of pregnancy and ante-partum hæmorrhage, and naturally he was intensely interesting on these.

Dr. R. A. Brews, Assistant Obstetrician of the London Hospital lectured on “The Anatomy and Physiology of Normal Labour,” in an original and lucid way. With easy mastery of his subject he combined comparative anatomy and embryology in explaining the musculature of the pelvic floor and its displacement in parturition. The anatomical changes were made to appear easy and simple to understand and became the foundation of his next lecture on certain mischances in pregnancy and their accurate recognition. Dr. Brews lectured without notes, taking his cue from his audience as to whether a topic required further elucidation or not.

A number of deaths have taken place from attempts to procure abortion by a method which at first sight would seem to be incapable of inflicting injury, and yet, according to the completeness with which the operative technique is successful the result is fatal, through shock. Dr. Lawrence took this subject, explained the physiology of surgical shock and illustrating his thesis by quotations from cases published in medical literature or communicated personally by the County Bacteriologist, Dr. Sutherland.

No Course would even approach completeness which did not deal with sepsis. Mr. Moir Shepherd, who does so much and such successful work for the County Council at Edenfield Maternity Home, Doncaster, dealt with all aspects of this subject and the best remembered advice he gave was to urge a watchful expectancy. His own considerable success was attained by restraining the surgical urge.

The lecture and demonstration by Miss Randell, S.R.N. Sister at St. Thomas's Hospital, London, was on “Remedial Exercises during Pregnancy and the Puerperium.” This unusual item was awaited with some apprehension but Miss Randell, with the assistance of Miss Mary Lamb—a superb model of physical development quickly dispelled any lingering doubt and gave a fascinating demonstration of exercises calculated to be of service to women going through pregnancy. It is an open secret that so great was the enthusiasm aroused by the demonstration that a competition was held the same night among the students for the most graceful exponent of rhythmical exercises.

The Menopause is a subject about which there is so little exact knowledge and so much vague opinion that the Women's Medical Federation some three or four years ago held an enquiry on the subject. A questionnaire was sent out to some four thousand women of various social grades and the answers were discussed and analysed by a woman's committee of which Miss Ruth Nicholson, Hon. Surgeon to the Liverpool Maternity Hospital, was the secretary. She lectured on the subject with considerable authority and chose for her second subject “Venereal Diseases in Women and Children” which she illustrated lavishly on the screen.



Almost all the lecturers volunteered the statement that their audience by its close attention and its intelligence contributed more than half to the success of the lectures and their questions at the close were further evidence of quick understanding and keenness. It is a great pleasure to put this on record, coming as it does spontaneously and independently from several sources.

Professor K. J. Browne is to read a paper at the next meeting of the British Medical Association at Bournemouth in July, on Eclampsia. He is anxious to know whether there is to-day a higher proportion of primigravidæ to multigravidæ than there was twenty years ago. Our official records give no help and he has not been able to get illustrative figures elsewhere. At the suggestion of Dr. Lawrence the midwives undertook to analyse their figures for each separate year. A form was provided for them and they subsequently returned them to the County Medical Officer who forwarded the totals to Professor Browne. They will have the satisfaction of contributing a "mite" to our store of knowledge.

The last day of the Course was devoted to a discussion of the tendencies of midwifery politics, suggestions for subjects for another Course and the expected effects of collecting doctors' fees from the patients.

Statement as to Cost.

The Committee approved of an estimate of £345 0s. 0d. for the provision of this Course, and below are the details of the expenditure incurred:—

Fees due to Training College for accom-						£	s.	d.
modation and meals ... ..						117	1	0
Railway fares for midwives ... ..						19	12	6
Lecturers' fees and expenses ... ..						63	13	0
Printing, stationery, postages, etc. ...						20	12	0
Travelling expenses of staff, conveyance								
of lecturers, etc. ... ..						20	2	6
<hr/>								
Income from 10 students in residence						241	1	0
@ £3 3s. 0d. each ... ..	31	10	0					
Income from lecture fees and meals ...	4	1	6			35	11	6
<hr/>								
Nett Cost to County Council						£205	9	6

The Nursing Homes Registration Act, 1927.

The above Act came into force on the 1st July, 1928, and repealed Part II. of the Midwives and Maternity Homes Act, 1926, which dealt with the registration of Maternity Homes.

Under the Nursing Homes Registration Act, 1927, all Nursing Homes are required to be registered by the Local Supervising Authority under a penalty not exceeding £50 on summary conviction.

The following table gives the number and classification of Homes registered by the County Council during the year.

Nursing Homes (other than Maternity cases)	...	...	...	1
Infirm and Care cases only	...	...	...	3
Maternity cases only	...	...	...	9

The number of registered Nursing Homes in existence at the end of the year was 87.

During the year one application for Exemption from Registration was granted.

Maternal Mortality.

In October, 1934, the Minister of Health issued Circular 1433 relating to the progress of schemes adopted for combating maternal mortality, and the Child Welfare Committee asked for a report as to the progress of the scheme.

A further communication was received from the Minister of Health asking the Committee to expedite consideration of this question, and to forward to him as soon as possible a copy of the report, together with information as to any action the Council had decided upon as a preliminary to the special visit mentioned in paragraph 7 of the Circular.

It will probably be remembered that in December 1930, the Minister of Health issued Circular 1167 and memorandum 156/MCW on Maternal mortality, in which attention was drawn to the Interim Report of the Departmental Committee on Maternal Mortality and Morbidity and this report made it clear that two of the essential measures for securing a reduction in maternal mortality were:—

- (1) General and sustained efforts to enlighten the women of the country as to the importance of ante-natal supervision.
- (2) The improvement and expansion, where necessary, of the maternity services of local authorities, which must form an important part of any national scheme.

The memorandum, which was considered by the Child Welfare Committee in November, 1931, set out in detail how the ante-natal work could be carried out, dealt with the supply of midwives, especially in rural areas, and how a local authority could assist by organising an efficient midwifery service, and by the provision of consultants, hospital beds and ancillaries such as sterilised maternity outfits, home helps, milk for expectant mothers and laboratory facilities.

STATISTICS.

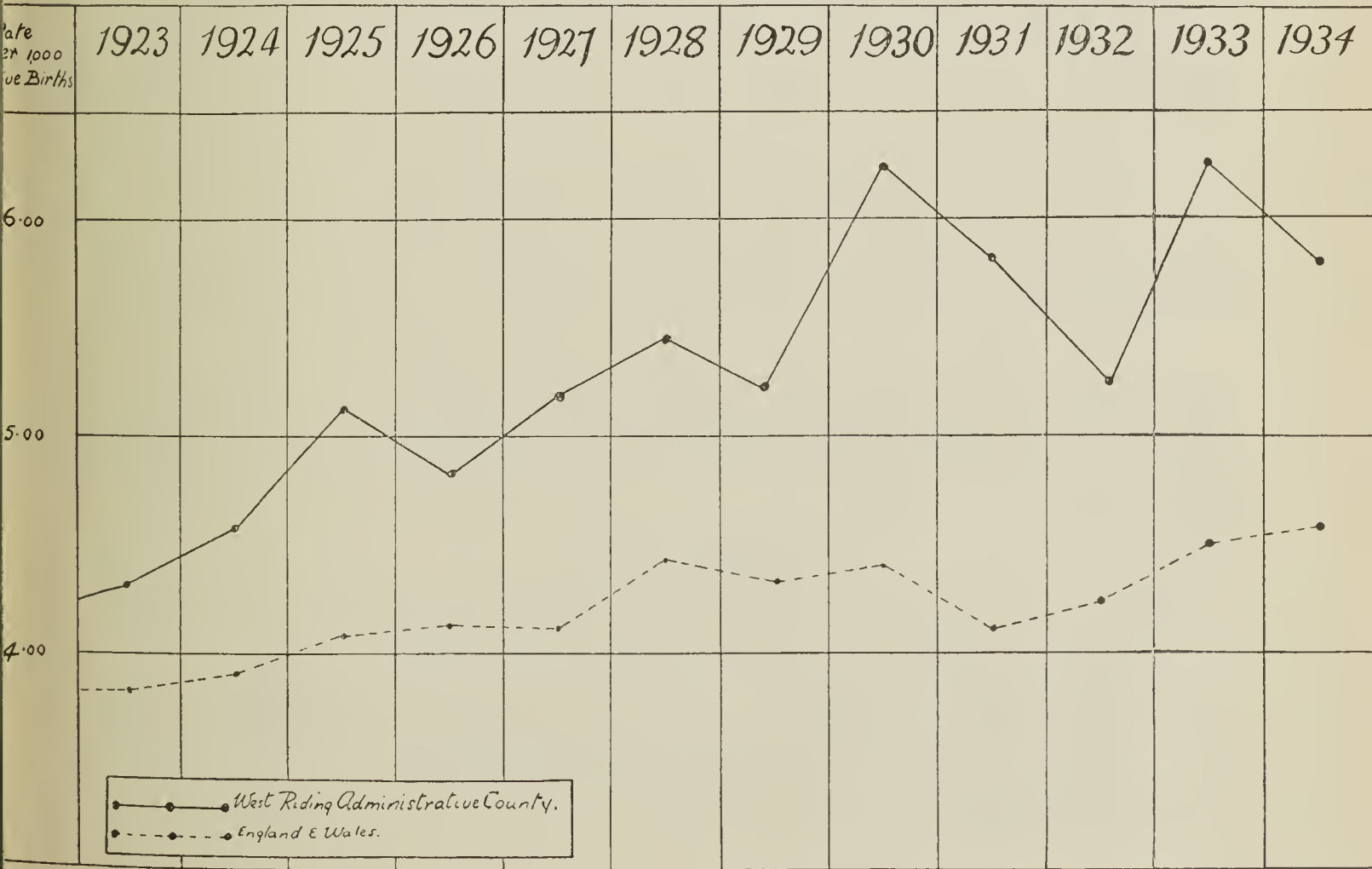
The West Riding is one of the "Black Areas" mentioned by the Minister of Health and the following statistics show that the deaths of mothers in the Administrative County are consistently higher than those for England and Wales.

MATERNAL AND INFANT MORTALITY.

Year	Deaths of mothers per 1,000 live births						Infant Mortality Rate	
	Puerperal Sepsis		Other Puerperal Causes		Total Puerperal Mortality			
	E. & W.	Admin. County	E. & W.	Admin. County	E. & W.	Admin. County	E. & W.	Admin. County
1924	1.39	1.58	2.51	2.99	3.90	4.57	75	83
1925	1.56	1.88	2.52	3.24	4.08	5.12	75	81
1926	1.60	1.66	2.52	3.16	4.12	4.82	70	73
1927	1.57	1.71	2.54	3.47	4.11	5.18	70	79
1928	1.79	2.11	2.63	3.34	4.42	5.45	65	62
1929	1.80	2.27	2.53	2.97	4.33	5.24	74	89
1930	1.92	2.43	2.48	3.82	4.40	6.25	60	65
1931	1.66	2.29	2.45	3.53	4.11	5.82	66	74
1932	1.61	2.05	2.60	3.17	4.21	5.22	65	70
1933	1.79	2.08	2.63	4.16	4.42	6.24	64	70
Average for 10 years	1.67	1.99	2.54	3.36	4.21	5.35	69	75
1924-33								
1934	2.03	2.31	2.57	3.50	4.60	5.81	59	58

As from the year 1931, there has been a revision in the classification of deaths, and this has affected the figures relating to Maternal Mortality. The figures for 1931 and following years are as a result not strictly comparable with those for the previous years which are shown in the above table, but the discrepancy is so slight as barely to affect either the figures or rates, and for all practical purposes comparisons can be made.

Maternal Mortality Rate during the years 1923 to 1934 in the West Riding Administrative County and England and Wales.



Although some deaths of mothers are associated with still-births, it has been the practice, owing to the absence of reliable figures of still-births, to base the maternal mortality rate on the **live** births only, and this has been done in the preceding table and chart. The registration of still-births commenced on the 1st January, 1929, and it is now possible to calculate a maternal mortality rate based on the total of live and still births, which is obviously the more accurate method, and the available figures are given in the table following:—

Year.	Deaths of mothers per 1,000 live and still births.					
	Puerperal Sepsis.		Other Puerperal Causes.		Total Puerperal Mortality.	
	E. & W.	Administrative County.	E. & W.	Administrative County.	E. & W.	Administrative County.
1929	1.73	2.16	2.43	2.83	4.16	4.99
1930	1.84	2.32	2.38	3.64	4.22	5.96
1931	1.59	2.19	2.35	3.37	3.94	5.56
1932	1.55	1.96	2.49	3.01	4.04	4.97
1933	1.71	1.98	2.52	3.96	4.23	5.94
1934	1.95	2.20	2.46	3.33	4.41	5.53

It should also be borne in mind that there are included in the figures for the Administrative County the 22 autonomous areas which exercise their own powers under the Maternity and Child Welfare Act.

After deducting the deaths of mothers occurring in these 22 areas, the figures for the County Maternity and Child Welfare area were slightly better in 1934.

	Whole of Administrative County.	County Council's Maternity and Child Welfare Area.
Maternal Mortality Rate (per 1,000 live and still births) ..	5.53	5.52
Maternal Mortality Rate (per 1,000 live births) ... ..	5.81	5.78
Maternal Mortality Rate (average for past 10 years) . . . .	5.35	5.32

### Notification of Births Acts.

During the year, 15,982 live births (15,373 legitimate, 609 illegitimate) and 764 still births (733 legitimate, 31 illegitimate), were registered in the County Notification of Births area, and 13,682 (13,218 live births and 464 still births) were notified. Of the 13,682 births, 11,053 were notified by midwives, and 2,629 by doctors and parents.

In 1934 there were 9 Boroughs, 12 Urban Districts and 1 Rural District exercising powers under the Maternity and Child Welfare and Notification of Births Acts, namely:—The Boroughs of Batley, Brighouse, Goole, Harrogate, Keighley, Morley, Ossett, Pontefract, Pudsey and Todmorden; the Urban Districts of Bingley, Bolton-upon-Deane, Castleford, Featherstone, Heckmondwike, Ilkley, Mexborough, Rothwell, Shipley, Spenborough and Wombwell, and the Rural District of Hemsworth.

The population of the Administrative County as estimated by the Registrar General at the end of 1934 was 1,534,900 and deducting the 22 autonomous areas enumerated above, having a total population of 494,124 the population of the County Notification of Births Area totalled 1,040,776.

Arrangements made by the County Council in the interests of economy and to avoid overlapping are as follows:—

Authorities performing school nursing for County Council on agreed terms: Bolton-upon-Deane, Bingley, Heckmondwike, Rothwell and Wombwell Urban Districts.

*Districts* where County Council employ whole-time school nurses on account of large size of area: Goole Borough, Castleford, Featherstone, and Mexborough Urban Districts and Hemsworth Rural District.

At Ilkley, the County Council's Nurse does health visiting for the Ilkley Authority.

At Bolton-upon-Deane, Heckmondwike, Ilkley and Wombwell, the County Council's school clinics combine with the maternity and child welfare centres belonging to the Local Authority.

The Bolton-upon-Deane and Mexborough Urban District Councils, two of the twenty two autonomous areas, applied to the County Council for their district to be included in the County scheme, and further consideration of the matter is postponed pending the re-arrangement of County districts.

### Home Visits.

Visits made by Health Visitors during the year were as follows (for detailed analysis see Table folded in at page 88).

Expectant Mothers	...	...	...	...	...	...	10,956
Infants under one—first visits	...	...	...	...	...	...	15,931
Infants under one—Total	...	...	...	...	...	...	159,260
Children 1/5	...	...	...	...	...	...	60,523
Special Visits (ophthalmia neonatorum, teething, marasmus, feeding, circumcision, etc.)	...	...	...	...	...	...	4,132
Measles cases	.../	...	...	...	...	...	2,531



Continuing on the value of home visiting one Health Visitor writes—"The health visiting shows more than any other way the actual home conditions, and it is from visiting that one gleans—usually without words—how things are, whether mother and child are being really fed or merely having their hunger appeased, and the impression that I get very much of late, that it is on most days merely a filling of the stomachs . . . the idea that if a child gets something when he is hungry, that is all that is required, the underlying idea being 'cheapness'. This occurs not in what are called poor homes alone; I sometimes think it is in the 'respectable' home where some appearance is kept up (and 33% of the income going to the Building Society and another 33% to pay the rates) that the money is diverted from the purchase of food."

### Measles.

During 1934, the Health Visitors made 2,531 visits to measles cases, distributed over 60 Sanitary Districts, being an increase of 1,990 over the previous year (see table folded in at page 88). The districts mainly affected were Ardsley East and West, Farsley, Rawmarsh, Stanley, Stocksbridge, Swinton, Thurstonland and Worsborough Urban Districts, and the Doncaster, Kiveton Park, Pontefract, Rotherham, Tadcaster, Thorne, Wetherby and Wortley Rural Districts.

Speaking of the complication of measles in a mining area, the health visitor says, "many cases of broncho-pneumonia have followed although the nursing has been good . . . I think that the small type of house is too hot and stuffy to nurse these children properly. Mothers have to cook and wash, coal is easily got and huge fires are kept, causing an overheated atmosphere, and even in the bedrooms, as the cisterns are constantly boiling. The cases which went to hospital fared well and recovered early. I wish all measles cases could be nursed in hospital." (An opinion was hazarded in the 1931 Report, p. 23, on the possibility of overheated houses pre-disposing to broncho-pneumonia.)

### Nursing Staff.

The establishment of the nursing staff employed in connection with maternity and child welfare work totalled 114 at the end of the year, comprised as under:—

- 2 Inspectors of Nurses and Midwives.
- 1 Emergency Nurse.
- 1 Health Visitor.
- 110 undertaking combined duties of Health Visitors and School Nurses.
- 63 part-time nurses employed by Nursing Associations who undertake, on behalf of the County Council, the health visiting and school nursing work. The majority of these associations serve sparsely populated rural areas.

During the year six Child Welfare nurses resigned their appointments, three on account of ill health; one was appointed Inspector of nurses and midwives under the Staffordshire County Council, and two left to be married. Four nurses were appointed and at the end of the year there were two vacancies on the staff.

### Maternity Services.

The essentials of a sound midwifery service are:—

1. The provision in every case of the services of a registered midwife to act either as a midwife or as a maternity nurse.
2. The provision of a doctor to carry out ante-natal and post-natal examination in every case, and to attend as may prove necessary during pregnancy, labour and the puerperium, all cases showing any abnormality.
3. The provision of a consultant, when desired by the doctor in attendance, during pregnancy, labour and puerperium.
4. The provision of hospital beds for such cases as need institutional care.
5. The provision of certain ancillary services. Availability of ante-natal records for person conducting the confinement.

Provision for many aspects of maternal care is within the existing powers of local authorities under the Midwives Acts, the Notification of Births (Extension) Act 1915, and the Maternity and Child Welfare Act, 1918. The services provided by the County Council at the present time under these Acts may be briefly enumerated.

### Provision of Midwives.

At the present time the County Council is not training midwives, but in accordance with Circular 559 of the Ministry of Health, a sum of £30 per trainee is paid to the West Riding Nursing Association in respect of those placed in districts in the West Riding Administrative Area. These average 7 yearly.

The actual number of midwives in the County is more than equal to requirements, but they are unevenly distributed over the area. It should be mentioned however, that if it were possible to distribute all the cases evenly among the midwives working in the County, there will be insufficient patients per nurse to provide a living wage.

### Provision of Transport, Telephone and Equipment.

The County Council has done much to increase the efficiency of Nursing Associations by assisting in the provision of motor transport for the nurse. It is known that 32 District Nursing Associations provide motor transport for the nurse, and the County Council has, in 14 instances, assisted financially towards the running expenses of these cars.

Several nursing associations in remote areas have installed a telephone in the nurse's home, but no doubt lack of funds has prevented other associations from acting similarly.

### **Payment of Midwife's Fee in Necessitous Cases.**

The County Council has a scheme in operation for contributing to the payment of midwifery fees in necessitous cases. The condition of payment is that the midwife charges a standard fee of 30/-, the patient contributing 10/- and the County Council £1. The average number of cases assisted yearly is 3,400. In cases where no maternity benefit has been received, the County Council pay the midwife the full fee of 30/-.

During 1934 a total sum of £3,147 was paid to midwives in the County Maternity and Child Welfare area, representing 3,095 cases

### **Payment of doctors called to the Assistance of a Midwife.**

This is a statutory obligation under the Midwives Act, 1918, and during 1934, midwives practising in the West Riding issued 6,385 medical aid notices, and a sum of £8,467 was paid to medical practitioners called by midwives in emergency.

This rising cost has not been accompanied by a diminution in the mortality rate.

### **Compensation of a Midwife when suspended from practice on account of Infection, not being herself in default.**

This is a statutory obligation under the Midwives Act, 1926.

During 1934, 4 midwives were compensated under this heading at a total cost to the County Council of £3 3s. 0d.

### **Compensation of Midwives for loss of cases sent to a Maternity Hospital from an Ante-Natal Clinic.**

This scheme is carried out by the County Council and a sum of 15/- is paid for each case booked by the midwife and sent to hospital on account of some abnormality.

During 1934, 346 cases were referred to a Maternity Hospital and a sum of £259 10s. 0d. paid in compensation to midwives.

### **Provision of a Post-certificate Course of Instruction.**

The County Council organise a residential course of lectures for midwives bi-annually at the Bingley Training College, and pay their travelling and board and all expenses. Whilst the midwives are at Bingley the Health Visitors do the midwifery work if a locum tenens cannot be obtained.

### **Employment of Midwives as Maternity Nurses.**

The County Council approved a scheme whereby assistance is granted in necessitous cases towards the fee of the midwife where she attends patients as a maternity nurse under the supervision of a medical practitioner, the patient contributing 10/- and the County Council 10/-.

During 1934, 22 cases received assistance under this scheme, compared with 26 the previous year.

It would appear that little progress has been made under the scheme, but it should be borne in mind that in these cases a doctor has been engaged by the patient and therefore whenever a midwife has also been engaged there are very few cases that come under the County Council's scheme of necessity.

If, as appears likely from advanced medical opinion, that in future a larger proportion of midwifery cases will be attended by doctors who have to some extent specialised in obstetrics, there is no doubt that this advance will be accompanied by a demand for more efficient nursing, and that the specialists will insist on skilled help.

### **PROVISION OF HOME NURSING FOR PUERPERAL FEVER AND OPHTHALMIA NEONATORUM.**

Such provision is made by the County Council whenever requested by the medical man in attendance, but during the past few years very few requests have been received, as we always urge, whenever a patient is fit to be removed, that there is a better chance of recovery by skilled nursing in hospital.

### **PROVISION OF HOME HELPS.**

The memorandum of the Ministry of Health suggests the provision of home helps for domestic assistance during the lying-in period, etc. The experiments of other Counties and County Boroughs tend to show that their schemes are not successful, though exception must be made in the case of a few. Yet in spite of failures of schemes as a whole, cases arise where a home help is a great advantage, in enabling a mother who is debilitated to be relieved of domestic worries for three weeks.

So far, action in this matter has been postponed.



## EMPLOYMENT OF CONSULTANT OBSTETRICIANS AT CONFINEMENTS.

Up to the present time the majority of local authorities have concentrated their attentions upon ante-natal facilities, the provision of trained midwives, maternity hospital accommodation, and consultant services. There appears, however, to be a very serious gap in the conduct of midwifery practice, namely, the absence of skilled judgment in many of the confinements which take place at the homes of the patients. This may be due indirectly to the National Health Insurance Acts, as a panel practitioner's interest appears to be taken up to such an extent to-day with health insurance work, that it is almost impossible for him to devote sufficient time to midwifery practice. Again, at the time of qualification, the average newly fledged practitioner has conducted only a score or so of confinements, and during his first years in practice he may attend probably very few cases. These suggestions are borne out by the fact that in the West Riding Administrative County, approximately 75% of the confinements are conducted by midwives. Accordingly the view has been expressed by a number of well informed authorities on the subject, that one vital cause of the high maternal mortality rate is the absence of expert treatment at the time of actual confinement. It has been stated that if such experts were employed at the actual confinement the maternal mortality would be reduced by half.

The matter is one worth considering, and I am discussing it with representative general practitioners and consultant obstetricians, in order to test the practicability of establishing in the West Riding a panel of experts, who would be available and ready at any time to be called in by a doctor or midwife in emergency, similar to the existing scheme whereby a midwife may call in a medical practitioner under the Midwives Acts. If such a scheme were approved, and satisfactory working arrangements made with all concerned, it would take some months to put it in operation, and until it was known to what extent the new service was being utilised, a forecast of the expenditure could not be given.

## INSTITUTIONAL PROVISION FOR MATERNITY.

Under this heading comes the provision of beds for cases of abnormal midwifery and abnormal ante-natal conditions, and for patients whose domestic circumstances are unsuitable for delivery at home; beds for the treatment of puerperal fever and ophthalmia neonatorum; also homes for unmarried mothers and their infants and for convalescent treatment and beds in association with clinics for restoration of lactation.

## HOSPITAL BEDS.

The County Council has arrangements with 29 municipal authorities or hospital committees for the admission of West Riding patients, and since the question of maternal mortality was first brought to notice in 1930, the number of admissions to maternity homes has increased from 1,834 to 2,892.

Much is being done under this heading and schemes have been prepared for the provision of accommodation in South Yorkshire, which is inefficiently served, i.e., a Home of 20 beds at Wickersley and a Home of 20 beds in the Wortley Rural area at a total cost of £37,000.

At Skipton, the County Council has given a grant of £2,000 towards the erection of a maternity unit of 6 beds and this provision is now proving inadequate, and a further scheme has been suggested to extend the accommodation to 14 beds, with a possible further grant from the County Council of £3,500.

At the County Maternity Home at Mexborough, the accommodation has been increased from 10 to 20 beds and a capital grant given by the County Council of £2,500 towards the erection of a nurses' hostel, to provide accommodation for the additional staff required by the extension.

At Harrogate, a scheme is on foot to erect a maternity unit at the Harrogate General Hospital of 12 beds, and here again the County Council will possibly be asked to contribute a sum in the region of £2,400.

In certain parts of the County, the position with regard to maternity home accommodation was becoming very acute towards the end of the year. The Bradford Municipal Maternity Home and the Bingley and Shipley Joint Maternity Home were closed to patients from the West Riding Maternity and Child Welfare area, as the accommodation was being fully taxed by their own residents, thus accommodation will need to be found elsewhere for approximately 80 patients annually. During 1934 the following homes were booked up and closed to County patients at various periods :—

Huddersfield Municipal	...	...	...	5 months.
South Elmsall	...	...	...	1 month.
Barnsley Municipal	...	...	...	1 month.
Ilkley private	...	...	...	2 months.
Wakefield Municipal	...	...	...	2 months.

However, a special sub-committee was appointed in July to consider any matters relating to the provision and maintainance of maternity home accommodation, and this question will be dealt with by the Maternity and Nursing Homes Sub-Committee in due course.



As regards the treatment of puerperal fever and pyrexia, 116 cases were dealt with under the regulations in 1934 at a cost to the County of £1,923 5s. 9d. Eighteen specialists were provided in addition.

During 1934, 70 cases of ophthalmia neonatorum were treated, 14 of these being in hospital and in no single case was vision impaired or any total blindness.

Under Section 101 of the Local Government Act, the County Council give an annual grant of £206 6s. 5d. to the St. Agnes Babies' Home at Harrogate, which is a home for unmarried mothers and their babies.

A small grant has also been given to St. Veronica's Home at Sheffield, which also deals with the unmarried mother and her child.

Convalescent treatment is also one of the many activities of the Child Welfare Sub-Committee and during the year, 76 patients were admitted to the following homes:—

Scarborough Royal Northern Sea Bathing Infirmary	...	39 mothers
Yorkshire Home at Withernsea	... ..	31 mothers and babies.
Blackpool—Seafield Convalescent Home	... ..	6 mothers

### Ante-natal Provision.

Provision of ante-natal clinics, ante-natal examinations by a general medical practitioner, health visiting, dental treatment, extra nourishment.

#### (a) Ante-natal Clinics.

At the time attention was drawn to this important subject the County Council had 113 centres open in the County, 60 being equipped to carry out ante-natal work, and at 22 special sessions were set apart for ante-natal consultations.

The Child Welfare Sub-Committee approved a two years programme embracing the establishment of a further 25 special ante-natal clinics at a cost of £1,250.

At the present time 54 centres are fully equipped to carry out ante-natal work and special sessions are held, at many of them, fortnightly.

Ante-natal clinics have not quite achieved all that was expected of them, but it is quite certain that if they were all closed the midwifery service would be distinctly less efficient.

To ensure the success of an ante-natal clinic, a special session should be held, apart from the Infant consultation. This adds slightly to the cost, as the premises have to be engaged an additional half day per month, and the services obtained of a medical man or woman qualified to carry out ante-natal examinations.

This part of the scheme is being speeded up and a further 30 centres are to be equipped during the financial year 1935-36, and special sessions set apart for ante-natal work at a cost of £50 each—(£18 16s. 0d. the cost of the additional equipment is non-recurring expenditure).

	£	s.	d.
Use of premises one half day monthly (inclusive cost)			
12 sessions	6	0	0
Fees of Medical Officer—12 sessions at say £2 2s. 0d.			
per sessions of 2 hours	25	4	0
To this must be added for one year the cost of the			
extra initial equipment required	18	16	0
	£50	0	0

The additional expenditure for the financial year 1935-36 will be £1,500.

#### ANTE-NATAL CLINICS.

Location	Day and House of Attendance	Medical Staff—Names and Qualifications	Average attendance per Session
1. Adwick-le-Street, Woodlands Wesleyan Chapel	First and Third Wednesday, 2 to 6 p.m.	Dora Chapman, M.B., Ch.B.	15
2. Airedale (Pontefract R.D.), Holy Cross Hut	First and Third Thursday, 2 to 5 p.m.	Christina M. Hawick, M.B., Ch.B.	10
3. Allerton Bywater (Tadcaster R.D.), Methodist Sunday School	Third Thursday, 2 to 3-30 p.m.	Dorothy Summers, M.B., Ch.B.	1
4. Ardsley E. & W. U.D. House, No. 1, Syke Lane, W. Ardsley	Second Thursday, 2 to 4 p.m.	Dorothy Summers, M.B., Ch.B.	6
5. Askern (Doncaster R.D.), Wesleyan Sunday School	Last Thursday, 2-30 to 4-30 p.m.	D. Malloch, M.B., Ch.B.	10
6. Bentley U.D. Welfare Pavilion	Alternate Fridays 2 to 6 p.m.	Bessie Cook, M.B., Ch.B.	20
7. Carcroft (Adwick-le-Street U.D.), Presbyterian Sunday School	First Monday, 2-30 to 5 p.m.	Bethia M. Newlands, M.B., Ch.B.	14
8. Catcliffe (Rotherham R.D.), House in Rotherham Road	Alternate Mondays, 2 to 4-30 p.m.	Rosie B. Becker, M.D., Ch.B., D.P.H.	5

## ANTE-NATAL CLINICS.—continued.

Location	Day and Hours of Attendance	Medical Staff—Names and Qualifications	Average attendance per Session.
9. Chapeltown (Wortley R.D.), Miners' Welfare Institute ... ..	First Friday, 2-30 to 4-30 p.m.	Enid F. Cook, M.B., Ch.B.	9
10. Conisbrough U.D., Army Hut, Balby Street Council School ... ..	Alternate Wednesdays 2 to 5 p.m.	Bethia M. Newlands, M.B., Ch.B.	10
11. Crofton (Wakefield R.D.), United Methodist Church ... ..	First Thursday, 2 to 4 p.m.	Doris M. Ringrose, M.B., Ch.B., D.P.H.	11
12. Cudworth U.D., Wesley Hall ... ..	First Friday, 2 to 5 p.m.	Jean J. Smith, M.B., Ch.B.	19
13. Dalton (Rotherham R.D.), Primitive Methodist Chapel ... ..	Last Thursday, 2-30 to 5 p.m.	Enid F. Cook, M.B., Ch.B.	11
14. Darfield U.D., Wesleyan Sunday School	Second Friday, 2-30 to 4-30 p.m.	Mary Boyd, M.B., Ch.B.	10
15. Darton U.D., Primitive Methodist Chapel	First Friday, 2-30 to 4-30 p.m.	Joyce E. M. White, M.R.C.S., L.R.C.P.	11
16. Denby & Cumberworth U.D., Victoria Memorial Hall ... ..	First Tuesday, 2 to 4-30 p.m.	Jean V. Kirkwood, M.B., D.P.H.	12
17. Dinnington (Kiveton Park R.D.), Wesleyan Sunday School ... ..	First and Third Fridays 2-30 to 5 p.m.	Marjorie T. Jago, M.B., Ch.B.	12
18. Drighlington U.D., Wesleyan Sunday School ... ..	Last Thursday 2 to 4-30 p.m.	Dorothy Summers, M.B., Ch.B.	11
19. Edlington (Doncaster R.D.), United Methodist Church ... ..	First and Third Thursday, 2 to 5 p.m.	Marjorie Rushbrooke, M.B., B.S.	15
20. Fitzwilliam (Hemsworth U.D.), Church Hut ... ..	First Wednesday, 2 to 4-30 p.m.	M. S. Ross, M.B., Ch.B.	20
21. Glasshoughton (Pontefract R.D.), St. Paul's Institute ... ..	Second and Fourth Wednesday 2 to 5 p.m.	Emily E. Johnson, M.B., Ch.B.	8
22. Guiseley U.D., Baptist Church ... ..	First Wednesday, 10 to 12 noon	Dorothy Summers, M.B., Ch.B.	11
23. Hebden Bridge U.D., Old Secondary School, Pitt Street ... ..	Last Friday 2 to 4 p.m.	Elizabeth Thompson, M.B., Ch.B.	4
24. Hemsworth U.D., Army Hut, West End Council School ... ..	First Tuesday, 2 to 5-30 p.m.	Jean J. Smith, M.B., Ch.B.	15
25. Hipperholme U.D., Wesleyan Sunday School ... ..	First Friday, 2 to 4-30 p.m.	Elizabeth Thompson, M.B., Ch.B.	9
26. Horbury U.D., Wesleyan Sunday School	Second Thursday, 2 to 5 p.m.	Annabella Rennie, M.B., Ch.B.	7
27. Horsforth U.D., St. Margaret's Hall ... ..	First Monday, 3 to 4 p.m.	C. W. Dudley, M.B., Ch.B.	5
28. Hoyland U.D., 8, Kirk Balk ... ..	First and Third Monday 2 to 5 p.m.	Enid F. Cook, M.B., Ch.B.	15
29. Kirk Sandall (Doncaster R.D.), Assembly Hall ... ..	First Monday, 2-30 to 4 p.m.	Joseph Graham, M.B., Ch.B.	6
30. Maltby U.D., Congregational Chapel ... ..	First Tuesday, 3 to 4 p.m.	W. Land Dibb, M.B., Ch.B.	14
31. Meltham U.D., Baptist Church ... ..	First Thursday, 2 to 4-30 p.m.	Hilda Leake, M.B., Ch.B. (Hnrs.).	10
32. Milnsbridge (Linthwaite U.D.), 93, Manchester Road ... ..	First Thursday, 2 to 5-30 p.m.	A. Rennie, M.B., Ch.B.	9
33. Mirfield U.D., Ings Grove ... ..	Third Monday, 2 to 5 p.m.	Hilda Leake, M.B., Ch.B. (Hnrs.).	15
34. Moorends (Thorne R.D.), Wesleyan Chapel ... ..	Second Wednesday, 11 a.m. to 1 p.m. and 2 to 5 p.m.	Helen Lindsay, M.B., Ch.B.	9
35. Normanton U.D., Park Pavilion ... ..	Second and Fourth Thursday 10 a.m. to 12-30 p.m.	Gertrude M. Mayhall, M.R.C.S., L.R.C.P.	10
36. Otley U.D., Primitive Methodist Chapel	First Tuesday, 2 to 4-30 p.m.	W. H. Galloway, M.R.C.S., L.R.C.P.	5
37. Outwood (Stanley U.D.), Church Institute ... ..	Second Wednesday, 2 to 4 p.m.	J. D. Bottomley, M.B., Ch.B.	9
38. Penistone U.D., Shrewsbury Methodist Chapel ... ..	First Friday, 2-30 to 5 p.m.	Muriel Wilby, M.R.C.S., L.R.C.P.	4
39. Queensbury U.D., Cricket Pavilion ... ..	First Friday 2-30 to 4-30 p.m.	George C. Sharp, M.B., Ch.B.	10
40. Rawmarsh U.D., Spiritual Temple, Parkgate ... ..	Alternate Thursdays, 2 to 7 p.m.	Doris Pindar, M.B., Ch.B.	20
41. Rossington (Doncaster R.D.), United Methodist Church ... ..	First and Third Thursdays 2 to 4-30 p.m.	Helen Lindsay, M.B., Ch.B.	10
42. Saddleworth U.D., Mechanics' Institute, Uppermill ... ..	Fourth Thursday, 2 to 4-30 p.m.	A. Rennie, M.B., Ch.B.	7
43. Sowerby Bridge U.D., Allan House ... ..	First Tuesday, 2 to 4-30 p.m.	Janet M. Macmillan, M.B., Ch.B.	8
44. Stainforth (Thorne R.D.), New Wesleyan Chapel ... ..	First Wednesday, 11 a.m. to 1 p.m. and 2 to 4-30 p.m.	Helen Lindsay, M.B., Ch.B.	15
45. Stanley U.D., Zion Congregational Chapel ... ..	First Friday, 2 to 4-30 p.m.	Dorothy Summers, M.B., Ch.B.	11
46. Swallownest (Rotherham R.D.), Church Hall ... ..	Second Thursday, 2 to 4 p.m.	Dora Chapman, M.B., Ch.B.	3
47. Swillington (Tadcaster R.D.), Hut, near Church ... ..	First Thursday, 2 to 5 p.m.	Dorothy Summers, M.B., Ch.B.	17
48. Swinton U.D., Rock House ... ..	First Thursday, 2 to 5 p.m.	Mary Boyd, M.B., Ch.B.	10
49. Thurcroft (Rotherham R.D.), Methodist Church ... ..	First and Third Friday 2-30 to 4-30 p.m.	Dora Chapman, M.B., Ch.B.	10
50. Thurnscoe U.D., St. Helen's Sunday School ... ..	Second and Fourth Friday, 2-30 to 5-30 p.m.	Joyce E. M. White, M.R.C.S., L.R.C.P.	14
51. Wales (Kiveton Park R.D.), Methodist Chapel ... ..	First Tuesday, 2 to 4 p.m.	Marjorie Rushbrooke, M.B., B.S.	7
52. Wath-on-Deane U.D., West Melton Wesleyan Chapel ... ..	Second and Fourth Wednesday 2 to 5-30 p.m.	Dora Chapman, M.B., Ch.B.	18
53. Whitwood U.D., Memorial Hall ... ..	First Tuesday, 3 to 5 p.m.	Marjorie Steven, M.B., Ch.B.	10
54. Worsborough U.D., Wesleyan Sunday School, Worsborough Dale ... ..	Alternate Tuesdays, 11-15 a.m. to 1-30 p.m.	H. A. L. Banham, L.R.C.P., L.R.C.S.	14
55. Doncaster Consultant Clinic } Edenfield Maternity Home, Thorne } Road, Doncaster ... .. }	Sessions arranged by appointment Usually one weekly	W. Moir Shepherd, F.R.C.S.	--



### (b) Ante-natal Work in Remote Areas.

In remote areas where there is no ante-natal clinic within reasonable distance, arrangements have been made whereby a local medical practitioner carries out two examinations:—

- 1st. General medical examination early in pregnancy.
- 2nd. Full obstetrical examination at the seventh or eighth month.

These examinations are carried out either at the patient's house or the doctor's surgery.

The County Council pay 5/- for each examination and mileage fee of 1/- per mile after the first two miles on the outward journey only.

The scheme is worked on similar lines to the calling in of a doctor in emergency in a midwife's case. Books of notices in triplicate have been supplied to midwives, one copy is sent to the doctor, one to County Medical Officer, and the other retained by the midwife. The doctor, on sending his account, attaches each notice he has received thereto.

This scheme was doubtfully received by the midwives but as they have now realised its effectiveness, they are co-operating more than formerly.

In 1934, 324 notices were issued to doctors by midwives against 164 issued during the seven months the scheme was working in 1933.

### (c) Dental Treatment of Expectant and Nursing Mothers.

Hitherto, a complete scheme has been lacking for the dental treatment of expectant and nursing mothers, and in only odd cases has financial assistance been given where the patient was too poor to pay for the necessary treatment.

A scheme was approved in November, to provide this treatment for nursing and expectant mothers attending Child Welfare Centres and Ante-natal Clinics, who are not eligible for dental treatment from any other service, provided that such treatment is certified by the medical officer of the centre to be necessary.

Arrangements are made for treatment, including the provision of dentures, to be carried out by dentists approved by the County Medical Officer, subject to the patient being allowed the choice of dentist in the district where she resides, and the treatment is carried out and paid for by the County Council and the cost of treatment recovered from the patient in accordance with the scale laid down.

A sum of £200 has been included in the ensuing year's estimates to cover the cost of treatment.

### (d) Extra Nourishment for Expectant and Nursing Mothers.

Dried milk is supplied to any expectant mother certified by the ante-natal officer to be in need of extra nourishment. This question of malnutrition among married women, especially in areas where prolonged unemployment persists, is at the present time engaging the attention of the department, and the following circular letter on the subject has been sent out to all medical officers of child welfare centres and ante-natal clinics, health visitors and midwives.

#### MATERNAL MORTALITY AND MORBIDITY.

"The West Riding Public Health Committee is anxious to take every step which can be of avail in reducing the number of deaths of mothers and the amount of ill-health taking place as the result of childbirth in the administrative county. One of the findings of the special committee set up by the Minister of Health to investigate the subject of maternal mortality was that malnutrition of mothers was a definite contributory factor to the high maternal death rate. From conversations I have had with medical practitioners and medical officers of child welfare and ante-natal clinics, and from reports from matrons of maternity homes, I feel satisfied that there must be a fair amount of under-nourishment among women in the West Riding. A suggestion which I have heard, and which appears to be fairly well founded, is that there is a marked tendency for mothers to sacrifice themselves by under-feeding in order to provide their children with more substantial meals."

"I am writing this letter to remind you that the County Council has the power to provide free food including milk for nursing and expectant mothers in those areas where it is responsible for administering the Maternity and Child Welfare Act, and although it is necessary to apply an income scale in deciding the ability or otherwise to pay, such a scale is not rigidly adhered to, and in any case, where real necessity can be shewn, appropriate issues of food, including milk can be made."

"My committee has asked me to inquire of doctors and nurses and those associated with maternity and child welfare work, as to the extent to which underfeeding among expectant and nursing mothers has been observed, and the Committee has in view the possibility of it being found necessary to provide meals or additional milk in connection either with child welfare centres or at special kitchens which would have to be arranged. I should be glad, therefore, if you would let me have any general impression which you have formed regarding the degree of underfeeding among mothers in your district, and it would be of value if the approximate number of mothers so affected could be given. In order to avoid duplication as a result of the midwife, health visitor or doctor, including the names of the same women in their lists, I suggest that the health visitor working at the child welfare centre should be informed of any mother whom you consider is not receiving adequate food. The health visitor will then forward her list, when complete, to me."



Replies received from medical officers of centres in response to the circular on the question of malnutrition of expectant mothers, show the position very satisfactory, when it is considered that 4,100 expectant mothers attended West Riding Ante-natal Clinics in 1934.

Of the 118 centres established by the County Council, the number of pregnant women definitely stated to be suffering from malnutrition is 190, or approximately 5% of those attending clinics.

The general opinion of medical officers is that they find very little, if any, under-nourishment amongst this class of patient, although it is admitted that mothers will sacrifice themselves in order to provide for their children. In every case where malnutrition is observed free milk is given on a generous scale if there is the slightest suspicion of need. All the records at each clinic have been carefully scrutinised, and taking as an example one of the most distressed areas, not more than 5% of expectant mothers appeared to be under-nourished.

The question of supplying extra nourishment in addition to milk, i.e., the provision of suitable mid-day meals, is one which needs careful consideration. In the circular of the Ministry of Health on the provision of milk, it is laid down that for expectant mothers this should only be supplied during the last three months of pregnancy. There is a certain danger which may arise if extra nourishment is supplied unnecessarily to the expectant mother, namely that she may become adipose, and at the same time the child before birth may become abnormally large, thus adding still further to the dangers of childbirth.

One medical practitioner with over 40 years midwifery experience has stated (and this view is expressed by many others), that it is the thin and not over-fed mother who has "the easiest time" at childbirth, and who produces the healthiest baby. Expectant mothers should not be under-nourished however, but their condition should be analogous to that of an athlete in training; and it will be seen therefore that the question is one for careful surveillance by the ante-natal officer, and if requests are received to supplement the supply of milk, it will be necessary for the doctor to prescribe the diet in each individual case.

The requirements of diet for a pregnant mother have been laid down in a memorandum by Professor Cowell, an expert on dietetics, and while it is too long to summarise and itself so condensed as to be difficult to do so, it gives a list of the chief bodily requirements and how these should be met in practice. These are briefly, in addition to the usual constituents, calcium and phosphorus for the development of bones and teeth, iodine to meet the need of increased thyroid activity, and the unit of proteid which provides energy without unduly raising blood pressure or throwing too much work on the kidneys.

To sum up, it is desirable that the pregnant mother should include in her diet, when this is possible :—

1. One quart of milk a day. (Calcium and phosphorus).
2. One egg a day. (Fat and vitamin).
3. A liberal serving of fresh vegetables and salad each day. (Mineral salts and vitamin).
4. Fresh fruit each day, preferably oranges or lemons. (Mineral salts and vitamin).
5. Sea fish and liver once or twice a week (Protein, fat and iodine).
6. During the last few months of pregnancy two or three teaspoonfuls of cod-liver oil. (This is provided for sale at the majority of centres by the Voluntary Committee). (Fat and vitamin).

Incidentally, the same kind of diet should be continued throughout the period of lactation.

These requirements will be met by definite instructions to the doctor prescribing the diet.

As an experiment, mid-day meals on these lines were provided to six expectant mothers at Hoyland, and the nurse reports that the women benefited considerably from the meals provided.

The cost of these meals worked out at 1/6 per head, and were provided at a local café, and the diet to be given was prescribed on similar lines to the above. It is now stated that these meals, which were varied daily, can be supplied at a cost of 1/3 per head.

In certain cases it is known, especially where the husband is unemployed, that the mother is unable to provide these necessary foods, and it is for this class of patient that a scheme for extra nourishment, in addition to the supplying of milk, is desirable. It is also important that the expectant mother should have these meals away from home, where it will be known that she actually consumed the meal herself.

The number of such women requiring meals does not warrant the establishment of special kitchens, and arrangements could be made locally for the meals to be supplied at a reasonable cost.

The supplying of such meals at school canteens would not be desirable as, when these meals are to be given, the expectant mother is nearing "term" and desires as much privacy as possible. The scheme would be for the provision of say three mid-day meals weekly for two or three months to that class of patient recommended by the ante-natal officer as in need of extra nourishment in addition to a supply of milk. The diet necessary would be prescribed by the ante-natal officer and the mother would be examined monthly and the type of meals changed if found necessary. Authority to supply the meals would only be given for a period not exceeding four weeks, and accounts would be submitted monthly, together with a receipt signed by the mother that she had received the meals. The arrangements would be made through the health visitor, and she would at times inspect the meals provided to see if they were in accordance with those prescribed by the doctor.

### Post-Natal Provision.

Provision of clinic for medical examinations, clinics for the **promotion of breast feeding, extra nourishment**.

The child welfare centres and ante-natal clinics provide for any services under this heading, and dried milk is available for nursing mothers.

### Consultant Services.

Whenever desired, consultant obstetricians are provided in connection with maternity patients in suitable cases. In 1933, consultant obstetricians were provided in 12 cases, and this year, consultants have been provided in 11 cases, at a cost of £62 17s. 0d.

### OTHER SERVICES.

#### Sterilised Maternity Outfits.

Although these outfits have not been officially provided by the County Council, arrangements have been made whereby voluntary committees of centres can purchase them through the County Supplies Department, for any women desiring them and many mothers have availed themselves of the privilege of obtaining these outfits through the child welfare centre at cost price (5/1 each).

#### Birth Control.

This subject has an important bearing on maternal mortality, and birth control clinics have been established at the ante-natal clinic at Swinton, the Out-Patients Department of the Leeds Maternity Hospital, the Edenfield Maternity Home, Doncaster, and the Ante-natal Clinic at Hipperholme. Women requiring such advice on medical grounds, are referred to these clinics by the Medical Officers of child welfare centres and ante-natal clinics.

Since the institution of these clinics towards the end of last year, 127 married women have received advice and been provided in the majority of cases with appliances free of cost. This subject is dealt with in more detail in a later part of this report.

#### Investigation of Maternal Deaths.

To assist the Ministry of Health in the research work which is being carried out with a view to promoting legislation to reduce the maternal death rate, the County Council has arrangements with consultants to investigate all deaths occurring in the Maternity and Child Welfare Area, and Dr. Rhoda Adamson of Leeds and Mr. Moir Shepherd of Doncaster are continually making these investigations and the results completed on the Ministry's Form M.C.W./97 are forwarded immediately to the Ministry. The fees paid by the County Council are £2 2s. 0d. for each investigation.

#### Bacteriological Laboratory.

The laboratory is available for the examination of urine for albuminuria, blood specimens for Wassermann test and any other examinations which may be required.

#### Expenditure.

The nett expenditure under the Maternity and Child Welfare Scheme has considerably increased during the past two or three years, consequent on the additional facilities provided under the maternal mortality and birth control schemes, and in the provision of additional maternity beds.

1932-1933	1933-1934	1934-1935
£68,911	£71,374	£72,674

This expenditure does not include any items for the provision of maternity home accommodation in South Yorkshire, mentioned previously.

#### Reports from Health Visitors.

On the subject of maternal mortality the nurses have contributed some miscellaneous information which is valuable and apt. "After many years of freedom from maternal deaths in this district, there were three cases in 1934 of deaths following childbirth:—

1. A case of double white leg ending in embolism. The woman had had four children, had not made any early arrangements for her confinement and had booked a bona-fide midwife only three weeks previously.
2. A woman with eight children had a history of a septic throat for several weeks previous to confinement. In spite of advice from both midwife and health visitor this woman refused to attend the ante-natal centre. Death was due to septic myocarditis four weeks after delivery.
3. A case of eclampsia with a history of fits at her first confinement, this being her third. She also refused to attend the ante-natal centre.

I am convinced that with early ante-natal supervision at least two of these three deaths might have been prevented."

Another nurse writes on this subject—"I feel very much on this matter and am doing all I possibly can for the welfare and happiness of expectant mothers with whom I come in contact. I have begun a register of known cases in my area, in which I record as far as possible the history of each mother during the whole of pregnancy, her visits to the child welfare centre, the ante-natal clinic, home visits (noting home environment) and the mother's mental outlook



My idea in keeping a register of cases is, that should a mother unfortunately lose her life in confinement, the history of that particular case from a nurse's point of view may considerably supplement the doctor's enquiry." To this I would like to add that a history of pregnancy obtained retrospectively is not likely to be so helpful as one taken during the course of pregnancy.

Again, "The Ante-natal Centre is very much appreciated by both midwives and patients and is certainly doing very useful work. I repeatedly hear the mothers say how glad they are that they attended it and how much it has helped them. The post-natal care is also very important and a great help to the mothers who willingly come for a thorough examination after their confinement. By this means several have received the after care they needed, who would otherwise have had to do without."

So too, "My observations have been that the post-natals are in many cases more pathetic than the ante-natal case, inasmuch as the mother is left to a prolonged battle when a more timely aid might have been very beneficial."

### Conclusions.

The West Riding has been rightly listed as one of the "blackest" areas as regards maternal mortality, nevertheless the County Council is probably second to none in showing its determination to effect a reduction in this rate.

One great stumbling block is the high incidence of abortions, and until the illegal practice of abortion is stamped out the maternal death rate will continue at a high level.

According to the final report of the Departmental Committee on Maternal Mortality and Morbidity, it is stated that one third of the deaths of mothers are due to abortion.

About 32% of expectant mothers attend ante-natal clinics, which can hardly be considered satisfactory. Midwives are booked for about 75% of the cases of confinement occurring in the County, which shows that they do not altogether avail themselves of the ante-natal facilities provided by the County Council.

As their living is a precarious one probably many are afraid of losing their cases, even though the County Council has a scheme for compensating them should the patient be referred to hospital. The one aim should be to get the midwife to take all her booked patients to the ante-natal clinic, or where one is not provided, to avail herself of the facilities provided for an ante-natal examination by a medical practitioner.

In view of the general increase in the demand for maternity hospital treatment, a review of the whole position in the County is necessary, and a report is to be presented to a special Sub-Committee.

## Nursing Associations.

### West Riding County Nursing Association.

The County Superintendent of the West Riding Nursing Association reports that the work in the County goes on steadily increasing. During 1934, two new associations have affiliated and two existing Queen's Districts have now joined the County Nursing Association, making a total of 121 affiliated associations.

The nurses continue to work well and loyally, carrying out their many duties in a capable and kindly way.

155 nurses are working in the 121 affiliated districts, and of these:—

82 are Queen's nurses,

29 are trained nurse-midwives,

44 are village nurse-midwives,

51 nurses do combined duties of midwifery, general, school and health visiting.

72 nurses do general and midwifery work only.

52 nurses do general work only.

The nurses have attended 14,886 general cases and

3,126 midwifery and maternity cases.

They have made 350,731 general nursing visits,

45,160 midwifery and maternity visits,

17,440 pre-natal visits,

17,561 infant health visits

5,958 school and home visits,

making a total of 436,850 visits.

The work of the Association is well managed and the County Superintendent and her assistant are in constant touch with this Department, and co-operate in the work with the two Assistant Inspectors of Nurses and Midwives in the County.



### The Local Government Act, 1929—Grants to Nursing Associations.

Section 101 of this Act deals with grants to Voluntary Associations and provides for securing payment by the County Council of annual contributions towards the expenses of Voluntary Associations providing Maternity and Child Welfare services in the County according to the above Act.

The payments made under this Scheme are in lieu of the grants which ceased to be payable as from the 31st March, 1930, and which were formerly paid by the Ministry of Health.

In January, 1933, the Minister of Health approved the Scheme made by the County Council under this Section of the Local Government Act, 1929, for the four years ending 31st March, 1937, and copies of the Scheme as under were forwarded to each Nursing Association concerned.

Voluntary Associations to which annual contributions will be paid by the Council.

(1) Name of Association.	(2) Amount of Annual Contribution.	(1) Name of Association.	(2) Amount of Annual Contribution.
	£ s. d.		£ s. d.
<b>Midwifery Services.</b>		<b>Midwifery Services—contd.</b>	
West Riding County Nursing Association, 9, Bridgefield Place, Leeds ... ..	1,048 2 6	Rawmarsh and Parkgate District ...	21 11 3
Aldborough and Boroughbridge and District ... ..	31 8 0	Ribblesdale Benefit ... ..	20 0 0
Arthington and Pool ... ..	16 0 0	Ripon Victoria Nursing Institution ...	25 0 0
Bentham ... ..	12 0 0	Sawley ... ..	35 0 0
Boston Spa and Thorparch ... ..	8 0 0	Scissett ... ..	7 0 0
Bretton and Woolley ... ..	12 0 0	Sedbergh ... ..	24 0 0
Burton Leonard ... ..	8 0 0	Sharow ... ..	28 0 0
Cantley ... ..	17 16 0	Sitlington ... ..	7 16 0
†Darrington ... ..	15 0 0	South Crosland ... ..	5 8 0
Denaby Main and Conisbrough ... ..	8 0 0	South Elmsall and District ... ..	15 0 0
Denby and Cumberworth ... ..	21 4 0	Sowerby ... ..	23 0 0
Emley ... ..	22 16 0	Spofforth ... ..	10 0 0
Greasbrough ... ..	10 0 0	Stanningley and Farsley ... ..	12 0 0
Hampsthwaite ... ..	20 0 0	Steeeton and Eastburn ... ..	9 0 0
Harrogate ... ..	25 0 0	Thurgoland ... ..	10 0 0
Heckmondwike ... ..	10 0 0	Tickhill ... ..	10 0 0
Hensall and Pollington ... ..	9 19 5	Todmorden ... ..	23 0 0
Hipperholme and District ... ..	12 0 0	Upper Wharfedale ... ..	20 0 0
Holme Valley Memorial Hospital ... ..	8 0 0	Walton and Heath ... ..	11 4 0
Horsforth ... ..	8 0 0	Whitley Bridge ... ..	14 8 0
Hunsingore ... ..	17 4 0	Wetherby and District ... ..	20 0 0
Killinghall ... ..	26 0 0	Yeadon ... ..	5 0 0
Kirkby Malzeard ... ..	32 0 0		
Kirkburton ... ..	10 0 0	<b>Infant Welfare Centres.</b>	
Knaresborough ... ..	15 0 0	Bentham Infant Welfare Centre—	
Ledsham and Ledston ... ..	14 8 0	St. Margaret's Sunday School,	
Long Marston ... ..	10 16 0	Robin's Lane, Bentham ... ..	5 4 7
Luddendenfoot Nursing Institution ...	12 0 0		
Micklefield ... ..	10 16 0	<b>Maternity Homes.</b>	
Mirfield ... ..	16 0 0	Heckmondwike District Nursing	
Meltham ... ..	9 0 0	Association—Maternity Home at	
Mytholmroyd ... ..	8 0 0	43, Cemetery Road, Heckmond-	
North Stainley ... ..	28 0 0	wike ... ..	214 4 11
Oakworth ... ..	10 8 6		
Otley ... ..	13 0 0	<b>Babies' Home.</b>	
Ouseburn and District ... ..	27 12 0	St. Agnes Babies' Home, Harrogate	206 6 5
Pannal and Beckwithshaw ... ..	16 0 0		
Rawcliffe ... ..	3 4 0		
Rawdon ... ..	7 0 0		

The following is a summary of the grants paid during the financial year 1934-35.

	£	s.	d.
(a) West Riding County Nursing Association ... ..	1,048	2	6
(b) Midwifery—Grants to 59 nursing associations (referred to in the scheme) ... ..	902	19	2
(c) Infant Welfare Centres ... ..	5	4	7
(d) Maternity Homes ... ..	214	4	11
(e) Babies' Homes ... ..	206	6	5
	<b>2,376</b>	<b>17</b>	<b>7</b>

† The Darrington Nursing Association did not carry out any nursing work during the year, and no grant was recommended.

## **Maternity Homes.**

The County Council has arrangements with 29 municipal authorities or hospital committees for the provision of lying-in accommodation for expectant mothers from the County Maternity and Child Welfare Area.

The total number of patients admitted was 2,892, an increase of 298 over the previous year.

The main increases occurred at the County Maternity Home, Mexborough (59), Doncaster (Edenfield private) (35), Huddersfield Municipal (37), Leeds Maternity Hospital (63), Jessop Hospital for Women, Sheffield (33).

Statistics with regard to these admissions are given on page 71.

In addition to the above mentioned accommodation there are 57 beds available in the County Public Assistance Institutions, and information with regard to these is given on page 72.

Schemes for the provision of maternity home accommodation received consideration during the year; they dealt mainly with the Harrogate and South Yorkshire areas.

### **Harrogate and District General Hospital.**

In March, a memorandum was presented giving details of the requirements and the cost for the erection of a maternity unit of 12 beds and Venereal Diseases Clinic.

After consideration of the report it was resolved to confer with members of the Harrogate Corporation to discuss the question of the Corporation contributing towards the capital cost of the erection of the maternity unit. This Conference has taken place, and there is every likelihood of the Corporation making some contribution.

At the present time the Harrogate and District General Hospital has six beds, but only emergency cases are admitted. These beds are in a general surgical ward and no separate midwifery nursing staff has been assigned to them.

The Minister of Health has already drawn the Corporation's attention to the admission of surgical and maternity cases to the same ward as being unsatisfactory, there being no suitable isolation provided for cases of puerperal sepsis.

Since 1927, the Harrogate Corporation, who exercises its own powers under the Maternity and Child Welfare Act, has had an arrangement with the Hospital to admit maternity cases for whom hospital treatment was necessary, and the Corporation agreed to pay to the hospital a sum of three guineas per week for each case admitted.

It will no doubt be the intention of the Harrogate Corporation to use the maternity unit in the future for patients in the Borough, and for this reason it was suggested that the Corporation should make some contribution to the capital cost.

The cost of the maternity block, including the equipment, will be approximately £7,400, and in regard to maintenance it is proposed that the County Council should reserve three beds during the first two years and to utilise unreserved beds whenever possible, the charge for beds reserved and unreserved being £3 3s. 0d. per week. After this period has expired, it is proposed to pay only for actual beds occupied.

It is understood that the Harrogate Hospital Committee has been promised a sum of £5,000 towards the cost of the erection of the maternity block, thus it will be seen there is an amount of £2,400 to be made up.

The estimated population of the area from which West Riding patients would come is 32,440, with approximately 400 births. Harrogate has an estimated population of 38,850, with 452 births.

Statistics show that about 20% of births occur in maternity hospitals, thus the County Council would probably keep three beds occupied and the Corporation 4 beds. The remaining 5 beds would be for emergency, observation and isolation cases.

The County Architect estimates that the cost of providing 12 maternity beds in accordance with the plan prepared by the Ministry of Health is £5,863. The proposals as set out on the plan are a single-storey building, and allowance is made for the provision of an additional storey at some future date, without interfering with the occupation of the ground floor portion of the premises. To this cost of building must be added a sum to cover the cost of furniture, equipment, and other incidental expenses of approximately £1,537, making a total estimated cost of £7,400.

### South Yorkshire.

A pressing need exists for the provision of maternity home accommodation in South Yorkshire, and the districts in most need of this service have been divided into two groups as follows:—

						Pop. 1931	Births 1934
(A)	Hoylandswaine	...	...	...	...	792	9
	Thurlstone	...	...	...	...	2,640	21
	Penistone	...	...	...	...	3,264	43
	Stocksbridge	...	...	...	...	9,255	144
	Penistone R.	...	...	...	...	5,460	74
	Wortley R.	...	...	...	...	29,053	388
	Worsborough	...	...	...	...	12,399	247
	Hoyland Nether	...	...	...	...	15,214	237
						<hr/> 78,077	<hr/> 1,163
(B)	Maltby	...	...	...	...	10,010	281
	Rotherham R.	...	...	...	...	38,734	816
	Kiveton Park R.	...	...	...	...	17,036	248
	Tickhill	...	...	...	...	2,297	42
	Rawmarsh	...	...	...	...	18,572	304
						<hr/> 86,649	<hr/> 1,691

With regard to group (A), various sites have been inspected as to suitability and situation to serve the districts named, and it is suggested that a Home of 20 beds be erected on land belonging to the Wortley Rural District Council at Greenhead Farm Estate, near Chapeltown. This site is in an elevated position and would permit of a maternity home being built with a southern aspect, and will be easily reached and near to the bus terminus.

At the time of writing this report, the scheme for this group of districts has not got beyond the stage of negotiating terms for the purchase of a site.

In regard to the second group of authorities with a total population of 86,649, a suitable site, two acres in extent, at Wickersley (Rotherham Rural District), was offered by Mr. J. C. Lister of Listerdale, Wickersley. This piece of land at Wickersley, which has been offered as a gift to the County Council, is admirably situated to serve the combination of districts referred to in this group.

It is proposed to erect and equip a maternity home of 20 beds at a total estimated cost of £17,300.

The scheme has received the approval of the Ministry of Health and tenders for the erection of the home have been obtained and it is hoped to have it open within the next twelve months.

### Skipton and District Hospital.

The maternity unit attached to this hospital, which provides for six beds, was opened in August, 1932. During 1934, 143 patients were admitted to the maternity ward, and the beds were kept fully occupied without leaving any margin for emergency cases which are frequently occurring, and the position is becoming a difficult one with the present accommodation. The service has been such a success that at times the maternity ward was full, a private ward was also occupied, and the women's ward sun balcony was accommodating 4 maternity cases. It is not uncommon some weeks to find as many as 9 and 10 maternity patients in the hospital.

A scheme is under consideration to extend the present accommodation to provide 12 beds, and plans and estimates are being examined by a Sub-Committee of the Hospital Committee.

### Bradford Municipal Maternity Home.

#### Shipley and Bingley Municipal Maternity Home.

Owing to lack of accommodation for their own cases, these two Homes were closed to West Riding patients, and it was necessary to find alternative accommodation.

The Home at Shipley, belonging to the Shipley and Bingley Councils, barely provides accommodation for Shipley cases, and it has been suggested that the Bingley Council should look elsewhere for accommodation. A proposal is being examined to provide a maternity unit attached to the Bingley Cottage Hospital, to provide beds for Bingley patients and for patients from the surrounding West Riding area, but this has not yet matured.

### County Maternity Home, Mexborough.

The following gives particulars of the work undertaken during the year at the County Maternity Home.

Twenty maternity beds are provided by the County Council, and during 1934, 365 patients were admitted, and 321 cases were delivered, the average duration of stay being 14 days.

The midwives employed in the wards delivered 304 and the doctors 17 cases. Medical assistance was sought in 76 cases, a decrease of 10 from the previous year. Four cases of puerperal pyrexia were notified during 1934. There were no cases of pemphigus neonatorum or ophthalmia neonatorum.



The number of infants not entirely breast fed while in the Institution was 14.

Three maternal deaths occurred during the year against six the previous year. Although one would like to see this number still lower it must be remembered that in an Institution of this kind a large number of women are admitted in emergency when all other measures have failed and it is a matter of congratulation that the number of deaths have been reduced by three with an increased number of admissions.

The cause of death of the three mothers referred to above were due to:—

1. Placenta Praevia.
2. Obstructed Labour—Caesarian Section.
3. Toxaemia Nephritis.

Number of infant deaths:—

- (i) Stillborn, 16. (ii) Within 10 days of birth, 9.

The cause of death of the infants was due to:—

Prematurity (6), Intra Cranial Haemorrhage (1), Congenital Heart (2).

The admissions to this Home are on the increase, and Colonel Connell, F.R.C.S., the honorary medical staff, house surgeons, matron, sister and nurses are to be congratulated on the excellent work which is being maintained at the Hospital.

The arrangements, whereby other local authorities exercising their own powers under the Maternity and Child Welfare Act, are allowed to send patients to the maternity wards at the County Maternity Home, are working satisfactorily and the distribution of the 365 cases admitted during 1934 was as under:—

West Riding (M. & C.W. Area)	...	...	...	274
Mexborough Urban District	...	...	...	40
Bolton-on-Deane Urban District	...	...	...	43
Wombwell Urban District	...	...	...	8
Total				365

#### PATIENTS ADMITTED TO MATERNITY HOMES.

The following table gives particulars regarding the admission of patients to Maternity Homes during 1934:—

Name of Municipal Authority or Hospital Committee.	No. of Maternity Beds in Institu- tion	No. of patients admitted from C.C.'s area during 1934	Deaths of Mothers	Deaths of Infants	Still- Births	Fees of Home per week
1	2	3	4	5	6	7
1. Barnsley Corporation ... ..	7	48	—	1	2	£ s. d. 3 3 0
2. Batley Corporation ... ..	10	10	—	—	—	3 0 0
3. Blackburn Corporation ... ..	20	—	—	—	—	4 14 6
4. Bradford Corporation ... ..	85	51	5	2	6	2 16 0
5. Burnley Corporation ... ..	20	—	—	—	—	4 4 0
6. Castleford U.D.C. ... ..	13	157	—	2	4	4 4 0
7. Colne Corporation ... ..	7	59	—	1	1	3 3 0
8. County Maternity Home, Montagu Hospital, Mexborough ... ..	20	365*	3	9	16	3 7 6
9. Doncaster, Edenfield (Private) ... ..	42	485	3	9	34	3 7 6
10. Goole U.D.C. ... ..	4	15	—	—	—	3 3 0
11. Royal Halifax Infirmary ... ..	25	154	1	2	17	2 9 0
12. Halifax General Hospital ... ..	35	90	3	3	6	2 12 6
13. Harrogate and District General Hospital ... ..	6	23	1	2	—	3 3 0
14. Heckmondwike Nursing Association ... ..	5	4	—	—	—	2 7 0
15. Holmfirth, Holme Valley Memorial Hospital ... ..	5	49	1	3	3	3 3 0
16. Huddersfield Corporation ... ..	40	217	—	2	8	4 0 0
17. Huddersfield Royal Infirmary ... ..	15	46	4	2	7	3 3 0
18. Ilkley ... ..	11	16	—	—	1	5 5 0
19. Keighley, St. John's Hospital ... ..	13	19	—	2	—	2 12 6
20. Leeds Maternity Hospital ... ..	135	428	4	19	31	3 15 10
21. Morley Corporation ... ..	8	24	—	—	1	3 5 0
22. Oldham Corporation ... ..	14	22	—	1	—	3 3 0
23. Ripon Nursing Institution ... ..	5	27	—	1	3	4 4 0
24. Sheffield, Jessop Hospital for Women ... ..	28†	257†	5	12	36	3 3 0
25. Shipley and Bingley Joint Municipal ... ..	19	49	—	1	3	3 10 0
26. Skipton and District Hospital ... ..	6	143	—	7	6	3 7 6
27. South Elmsall, etc. ... ..	6	5	—	—	—	3 3 0
28. Wakefield Corporation ... ..	12	70	—	1	5	3 3 0
29. York Corporation ... ..	28	59	1	3	3	3 7 6
	644	2892	31	85	193	

\* This figure includes 40 cases from Mexborough, 43 Bolton-upon-Deane and 8 from Wombwell Urban Districts, where the local Council is the Authority for administering the Maternity and Child Welfare Act.

† West Riding patients admitted under the 1d. in the £ scheme.

Note—(a) Harrogate and the Huddersfield Royal Infirmarys at present only admit complicated cases.

(b) Castleford U.D.C. and Huddersfield Corporation only accept normal cases.

With the exception of Bradford (St. Luke's), Harrogate Hospital, Halifax (General), Royal Halifax Infirmary, Huddersfield Royal Infirmary, Leeds, Sheffield, and York, where the fees are inclusive, a surgeon's fee is chargeable for special cases.

It is satisfactory to report that at 18 maternity homes where 891 mothers were confined no maternal deaths occurred.

The following summary gives the causes of deaths of the 31 mothers (a decrease of 13 from the previous year) referred to in Column 4 of the preceding table, occurring in 11 homes as follows:—Bradford Municipal (5), County Maternity Home (3), Edenfield Maternity Home, Doncaster (3), Royal Halifax Infirmary (1), Halifax General Hospital (3), Harrogate and District General Hospital (1), Holme Valley Memorial Hospital, Holmfirth (1), Huddersfield Royal Infirmary (4), Leeds Maternity Hospital (4), Jessop Hospital for Women, Sheffield (5), York Municipal (1).

Puerperal sepsis ... ..	8	Eclampsia ... ..	6
Placenta prævia ... ..	1	Post-partum hæmorrhage ... ..	1
Cæsarian section ... ..	4	Toxæmia ... ..	2
Ante-partum hæmorrhage ... ..	1	Cardiac disease ... ..	1
Pelvic peritonitis ... ..	1	Accidental hæmorrhage ... ..	2
General peritonitis ... ..	1	Acute yellow atrophy ... ..	1
Obstructed labour ... ..	1	Pyelitis ... ..	1

The following table sets out the causes of death of the 85 infants who died within 10 days of birth in maternity homes. This shews a decrease of 14 on the previous year.

Prematurity ... ..	35	Cerebral hæmorrhage ... ..	3
Convulsions ... ..	3	Toxæmia ... ..	1
Malæna ... ..	1	Congenital heart ... ..	3
Feebleness ... ..	2	White asphyxia ... ..	3
Cardiac failure ... ..	1	Shock ... ..	1
Spina bifida ... ..	3	Pneumonia ... ..	4
Atelectasis ... ..	9	Enlarged thymus gland ... ..	1
Hæmorrhagic disease ... ..	2	Oedema cerebral ... ..	1
Intra cranial injury ... ..	1	Septicæmia ... ..	1
Intra cranial hæmorrhage ... ..	5	Umbilical cord, hæmorrhage ... ..	1
Albuminuria ... ..	1	Difficult forceps ... ..	1
Contracted pelvis ... ..	1	Obstructed labour ... ..	1

### LOCAL GOVERNMENT ACT, 1929—PART I.

Under part 1 of the Local Government Act, 1929, 22 Institutions and 1 separate hospital (Keighley) were transferred to the County Council as from the 1st April, 1930. In 16 of these Institutions, 57 beds are available for maternity cases and during 1934, 446 patients were admitted. The following Table gives particulars of these Institutions, shewing beds available, cases admitted, and number of maternal and foetal deaths.

Name of County Institution.	No. of maternity beds.	No. of cases admitted during 1934.	No. of cases delivered by		No. of cases in which medical assistance was sought by a midwife in emergency	No. of cases notified as				No. of Maternal deaths.	No. of Foetal deaths.	
			Midwives.	Doctors.		Puerperal Fever.	Puerperal Pyrexia.	Pemphigus Neonatorum.	Ophthalmia Neonatorum.		Still-born.	within ten days of birth.
1. Batley ... ..	10	32	27	5	7	—	—	—	—	—	2	4
2. Clayton ... ..	6	16	15	1	2	—	—	—	—	—	1	—
3. Goole ... ..	4	6	6	—	—	—	—	—	—	—	—	—
4. Grenoside ... ..	1	2	2	—	—	—	—	—	—	—	—	—
5. Hemsworth ... ..	2	8	6	2	2	—	—	—	—	—	—	—
6. Keighley ... ..	13	285	256	29	—	—	1	—	—	1	11	8
7. Knaresborough ... ..	4	16	16	—	1	—	—	—	—	—	1	2
8. Otley ... ..	2	2	2	—	—	—	—	—	—	—	—	—
9. Penistone ... ..	—	1	—	1	—	—	—	—	—	—	—	—
10. Pontefract ... ..	5	8	7	1	1	—	—	—	—	—	—	1
11. Ripon ... ..	1	2	2	—	—	—	—	—	—	—	—	—
12. Selby ... ..	2	26	12	14	15	—	—	—	—	1	4	—
13. Settle ... ..	2	—	—	—	—	—	—	—	—	—	—	—
14. Skipton ... ..	1	1	1	—	—	—	—	—	—	—	—	—
15. Tadcaster ... ..	1	2	—	2	—	—	—	—	—	—	—	—
16. Todmorden ... ..	1	2	2	—	—	—	—	—	—	—	—	—
17. Wakefield ... ..	2	37	34	3	2	1	1	—	—	—	4	1
	57	446	388	58	30	1	2	—	—	2	23	16

MATERNAL DEATHS. Two occurred in two of the above institutions during the year. The cause of death in each case was due to eclampsia.

INFANT DEATHS. Sixteen deaths of infants occurred in 5 of the above institutions, and these were due to—prematurity (7), difficult parturition (1), congenital debility (1), atelectasis (1), enlarged thymus gland (1), subdural hæmorrhage (1), hæmorrhage neonatorum (1), anencephalus (1), inanition (1), dystocia (1).

### COLLECTION OF MATERNITY HOME FEES.

The County Council have fixed the maximum fee to be paid by patients received into Maternity Homes by arrangement with the County Council, at £3 3s. 0d. per week, and in cases where the fee charged exceeds £3 3s. 0d. per week the County Council pay the balance of such fee.

The County Council also pay the doctor's and specialist's fees.

In July 1934, the County Council amended the scale of payment, as under, and in necessitous cases, the whole or part of the fees are paid by them.

#### Scale of Payment.

Where the total family income, after deducting 5/- for each child under 14 years of age, and not working.	Amount payable by Patient.
Does not exceed 30/- per week ... ..	Nil
Between 30/- and 40/- per week ... ..	Amount of Maternity Benefit received
Between 40/- and 50/- per week ... ..	Half Fees.
Exceeds 50/- per week ... ..	Whole Fees.

In ascertaining the weekly income of the family, the average earnings for the four weeks preceding the birth are taken.

As from the 1st January, 1934, the collection of fees was taken over by the West Riding Treasurer's Department and the work is undertaken by 19 area collectors.

The Public Health Department ascertains the fee to be paid in each case, and is responsible for the rendering of accounts.

The number of claims dealt with are as follows:—

	1931	1932	1933	1934
Whole fees ... ..	179	308	179	280
Half fees ... ..	125	263	334	250
Maternity benefit ... ..	226	464	979	681
	530	1,035	1,492	1,211

The following statement is for the period 1st April, 1934, to 31st March, 1935:—

	£	s.	d.	£	s.	d.
Amount outstanding 1st April, 1934 ... ..	1,765	14	10			
Less amounts written off ... ..	587	14	3			
Accounts rendered during the financial year				1,178	0	7
				4,544	1	0
				5,722	1	7
Less fees collected by West Riding Treasurer during the financial year ... ..				3,980	8	0
Amount outstanding on 1st April, 1935 ...				1,741	13	7

Included in the total claims of £4,544 1s. 0d. is a sum of £703 18s. 2d. in respect of patients admitted to the County Maternity Home at Mexborough from the Urban Districts of Bolton-on-Dearne, Mexborough and Wombwell, which Councils are autonomous for Maternity and Child Welfare and have an agreement with the County Council for the treatment of maternity patients from their respective areas, and the refund of fees in one case by Durham County Council.

### Convalescent Treatment for Mothers and Infants.

A stay in a Convalescent Home is specially important for recovery after certain cases of confinement, and for some conditions in young children.

The County Council have arrangements with the following Institutions for the admission of mothers and children:—

Name of Convalescent Home.	Class of Patient admitted.	No. of W.R. patients admitted during 1934.	Fees of Home per week.
Scarborough, Royal Northern Sea Bathing Infirmary ... ..	Mothers	39	£ s. d. Recommend ... .. 1 1 0 Board, etc ... .. 0 12 6
Bridlington, St. Anne's ... ..	Mothers	—	Recommend ... .. 1 5 0 Board, etc. ... .. 0 15 0
Ilkley ... ..	Mothers	—	Board, Residence, etc. 1 0 0
Wentbridge, Convalescent Home for Children ... ..	Children	—	do. ... .. 0 10 0
Yorkshire Home, Withernsea ... ..	Mothers and Babies	31	do. ... .. 1 15 0
Blackpool, Boscombe Convalescent Home ... ..	Mothers and Babies	6	do. ... .. 1 15 0
	Mothers only	—	do. ... .. 1 10 0
		76	

The Yorkshire Home at Withernsea for mothers and babies is meeting a long felt want and the two beds reserved by the County Council were kept fully occupied during the season the Home was open.



## Homes and Hospitals for Sick or Ailing Children under Five Years of Age. and Orthopædic Treatment.

The following table shews that during the year 99 children under five years of age were treated in hospitals. The cases dealt with were mainly those of premature babies, improper feeding, or ophthalmia neonatorum.

Name of Home or Hospital	No. of patients treated by County Council during 1934	Inclusive fees of Home per week		
		£	s.	d.
1. Edenfield Private Maternity Home, Doncaster	13	1	1	0
2. Halifax (General Hospital)	—	1	1	0
3. Harrogate Municipal Babies' Hospital	16	1	10	0
4. Harrogate and District General Hospital	3	3	3	0
5. Huddersfield Maternity Home	—	1	1	0
6. Leeds General Infirmary	—	1	1	0
7. Leeds Maternity Hospital	16	1	1	0
8. Marguerite Home, Thorparch (Orthopædic)	11	1	15	0
9. Scarborough Children's Hospital and Convalescent Home	35	1	1	0
10. Shipley and Bingley Municipal Maternity Home	1	1	1	0
11. Skipton and District Hospital	2	1	1	0
12. Wakefield (Clayton Hospital)	1	2	16	0
13. York Municipal Maternity Hospital	1	1	1	0
14. Yorkshire Children's Orthopædic Hospital, Kirbymoorside	—	1	18	6
Total ...	99			

No difficulty has been experienced in securing the necessary treatment. The Harrogate Corporation has a babies' ward housed in their child welfare premises, and when cots have been available, the provision made here has proved extremely useful in dealing with cases such as weakly infants and improper feeding. Babies requiring specialised treatment have been sent here from South Yorkshire, which entails a long rail or motor journey for mother and child. Some similar provision as that at Harrogate is needed to supplement the work of the Child Welfare Centres in the southern part of the Riding, and there is a possibility of cots being provided at the Montagu Hospital, Mexborough.

The Board of Management at the latter hospital has extended their accommodation and provided a further two wards containing 10 beds each. The original intention of the Board was to use these beds for medical purposes.

The Board has, however, approached the County Council as to the possibility of these beds being utilised to full advantage, and it is suggested that one ward might be set apart for the treatment of children's ailments, and the other ward equipped for orthopædic work. If such a scheme matures, the County Council will have their own beds, centrally situated in a large populous area in South Yorkshire. There is already on the staff of this Hospital a visiting physician who has wide experience in children's diseases.

The County Council has recently approved a scheme to utilise the beds at the Montagu Hospital, Mexborough, and at the time of writing this report, negotiations are proceeding with the Hospital Board. The proposal is that the County Council should equip the two wards of 10 beds each and pay the Hospital Committee for maintenance at a figure to be agreed upon. One of the wards would be used mainly for orthopædic surgery and the other for the treatment of children's ailments.

It is estimated that the annual maintenance charges of the two schemes would amount to £1,830 per annum. The cost of equipping the two wards will be somewhere in the region of £1,200.

At the present time the Public Health and Education Committees have arrangements for orthopædic treatment with the following Institutions:—

Leasowe (Cheshire)	...	...	...	...	£2	1	0	per week.
Kirbymoorside (North Riding)	...	...	...	...	£1	18	6	„ „
Heswall (Cheshire)	...	...	...	...	£1	12	6	„ „
Thorparch (West Riding)	...	...	...	...	£1	15	0	„ „

Child Welfare Centres and School Clinics.

The following is a list of Centres established by the County Council and also of the Voluntary Centres in the Riding:—

Name and Address.	Sessions held weekly, fortnightly, etc.	Day and time of Meeting.	Av. Attendance per Session		Number who attended for the first time during 1934.			Total No. of Sessions held.	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1934.				Total No. of children who were in attendance at the Centre and who, at the end of the year were:—	
			Expectant Mothers.	Children	Expectant Mothers.	Children under one.	Children between the ages of one and five		Exp. Mos.	Children	Exp. Mos.	Infants under one.	Children between 1 & 5 yrs.	Total Children	Under one year of age	Between the ages of 1 and 5 yrs.
1. Adwick-le-Street, Woodside Methodist Chapel, Woodlands ...	Weekly	Thurs. 2—4	15	63	114	111	19	Whole-time M.O.H.	317	707	317	864	2244	3108	100	173
2. Airedale (Pontefract R.D.), Holy Cross Hut, ...	Do.	Mon. 2—4	10	41	83	89	5	Part-time Medical woman	195	1294	195	1247	672	1919	101	68
3. Allerton Bywater (Tadcaster R.D.) Miners' Welfare Inst. ...	Do.	Mon. 2—4	2	53	20	35	20	Part-time Medical man	25	1217	25	1616	820	2436	17	110
4. Altofts, Red Triangle Club ...	Do.	Wed. 2—4	—	29	—	32	9	Do.	—	347	—	822	597	1419	38	84
5. Ardsley East (Ardsley E. & W. U.D.), Primitive Methodist Chapel ...	Do.	Tues. 2—4	—	39	12	46	2	Do.	1	511	23	960	877	1837	40	60
6. Ardsley West (Ardsley E. & W. U.D.), 1, Syke Lane, West Ardsley ...	Do.	Mon. 2—4	6	34	21	50	3	Do.	35	373	35	840	747	1587	49	43
7. Armthorpe (Doncaster R.D.), Miners' Welfare Institute ...	Do.	Thurs. 2—4	1	60	40	123	30	Do.	49	1133	51	1954	927	2881	123	116
8. Askern (Doncaster R.D.), Baptist Sunday School ...	Do.	Tues. 2—4	10	44	54	134	98	Do.	115	624	163	1042	940	1982	163	54
9. Baildon, Wesleyan Chapel ...	Do.	Mon. 2—4	—	23	3	76	29	Do.	2	600	3	600	477	1077	53	132
10. Barnoldswick, Bethesda Baptist Chapel ...	Do.	Thurs. 2—4	—	51	8	96	8	Part-time Medical woman	5	169	20	1900	552	2452	86	
11. Bentley, Welfare Pavilion ...	Do.	Wed. 2—4	20	69	121	214	92	Whole-time M.O.H.	267	1378	267	2592	852	3444	234	90
12. Birdwell, (Worsborough U.D.), United Methodist Church, Chapel Street ...	Do.	Wed 2—4	—	46	11	50	10	Part-time Medical man	9	694	29	784	1569	2353	46	115
13. Birkenshaw, Methodist Free Church ...	Do.	Tues. 2—4	—	39	10	74	17	Do.	9	916	26	1028	783	1811	85	79
14. Birstall, United Methodist Church	Do.	Wed. 2—4	1	38	9	75	12	Do.	22	611	59	587	1284	1871	70	76
15. Boston Spa (Wetherby R.D.), Congregational Chapel ...	Do.	Wed. 2—4	1	28	4	41	2	School M.I.	29	1288	47	841	450	1291	35	57
16. Bramley (Rotherham R.D.), Miners' Welfare Hall ...	Do.	Wed. 2—4	—	41	10	130	20	Part-time Medical man	10	759	10	1537	560	2097	79	132
17. Carcroft (Adwick-le-Street U.D.), Presbyterian Sunday School ...	Do.	Thurs. 2—5	14	57	74	100	9	Whole-time M.O.H.	171	740	171	828	1831	2659	80	82
18. Catcliffe (Rotherham R.D.), Church Mission Hall ...	Fort-nightly	Wed. 2—4	5	77	24	120	1	Part-time Medical man	117	2003	118	1247	756	2003	97	132
19. Chapeltown (Wortley R.D.), Miners' Welfare Pavilion ...	Weekly	Wed. 2—4	9	45	18	80	9	Whole-time M.O.H.	29	607	29	1410	881	2291	111	90

# Child Welfare Centres and School Clinics.—continued.

Name and Address.	Sessions held weekly, fortnightly, etc.	Day and time of Meeting.	Av. Attendance per Session		Number who attended for the first time during 1934.			Present arrangements for medical supervision.	Total No. of Sessions held.	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1934.				Total No. of children who were in attendance at the Centre and who, at the end of the year were:—	
			Expectant Mothers.	Children	Expectant Mothers.	Children under one.	Children between the ages of one and five			Exp. Mos.	Children	Exp. Mos.	Infants under one.	Children between 1 & 5 yrs.	Total Children.	Under one year of age	Between the ages of 1 and 5 yrs.
20. Conisborough, Army Hut, Balby Street Council School ... ..	Weekly	Thurs. 2—4	10	94	94	159	28	School M.I.	51	234	1794	237	2623	2174	4797	133	235
21. Conisborough (Upper), Migers' Welfare Institute	Do.	Mon. 2—4	2	112	17	126	20	Part-time Medical woman	46	26	1341	101	3886	1262	5148	92	200
22. Crigglesstone (Wakefield R.D.), Village Institute ... ..	Do.	Wed. 2—4	—	42	—	62	9	Part-time Medical man	51	—	1730	—	743	1388	2131	52	139
23. Crofton (Wakefield R.D.), United Methodist Church	Do.	Mon. 2—4	11	30	30	62	6	Do.	47	42	798	42	789	613	1402	53	76
24. Cudworth, Wesley Hall	Do.	Wed. 2—4	19	77	98	127	85	Do.	47	225	1032	382	2606	1015	3621	117	62
25. Dalton (Rotherham R.D.), Primitive Methodist Chapel	Do.	Wed. 2—4	11	47	53	86	20	Do.	48	138	1225	138	2055	181	2236	53	128
26. Darfield, Wesleyan Sunday School, Barnsley Road ... ..	Do.	Wed. 2—4	10	32	127	68	58	Do.	51	127	323	127	610	1004	1614	68	84
27. Darton (Staincross), Wesleyan S.S., Barnsley Road ... ..	Do.	Thurs. 2—4	—	55	4	51	12	Do.	50	—	555	21	857	1917	2774	56	97
28. Darton (Darton), Primitive Methodist Chapel	Do.	Wed. 2—4	11	65	158	107	29	Do.	51	147	700	171	1337	1994	3331	96	137
29. Darton (Gawber), Adult School	Do.	Tues. 2—4	—	54	—	59	26	Do.	46	—	656	—	999	1498	2497	47	142
30. Denby and Cumberworth, Victoria Memorial Hall ... ..	Fort-nightly Weekly	Wed 2—4	12	26	12	59	5	School M.I.	25	43	568	44	305	340	645	49	51
31. Dinnington (Kiveton Park R.D.) Wesleyan Sunday School	Do.	Tues. 2—4	12	64	76	109	38	Part-time Medical woman	46	139	605	139	2132	824	2956	130	60
32. Dodworth, Mechanics' Institute, High Street ... ..	Do.	Tues. 2—4	—	59	29	83	8	Part time Medical man	48	52	963	85	1472	1376	2848	72	190
33. Drighlington, Wesleyan Sunday School	Do.	Mon. 2—4	11	48	40	61	22	Part-time Medical woman	46	162	1547	167	1220	994	2214	59	146
34. Dunscoft, (Thorne R.D.), Church Hall	Do.	Tues. 2—4	—	40	5	62	38	Part-time Medical man	46	5	832	5	1217	697	1914	62	38
35. Earby, Old Grammar School	Do.	Wed. 2—4	1	37	11	54	4	do.	48	18	250	48	788	1011	1799	39	89
36. Ecclesfield (Wortley R.D.), Gatty Memorial Hall	Weekly	Mon. 2—4	—	46	3	56	4	Whole time M.O.H.	46	11	514	14	502	1620	2122	56	124
37. Edlington (Doncaster R.D.), Primitive Methodist Chapel	Do.	Tues. 2—4	—	53	6	106	17	Do.	45	10	1168	25	1342	1038	2380	83	87
38. Elland, Drill Hall	Do.	Wed. 2—4	1	51	40	79	4	Part-time Medical man	50	58	712	85	1038	1521	2559	69	163



Name and Address.	Sessions held weekly, fortnightly, etc.	Day and time of Meeting.	Av. Attendance per Session		Number who attended for the first time during 1934.			No. of Sessions held.	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1934.				Total No. of children who were in attendance at the Centre and who, at the end of the year were:—	
			Expectant Mothers.	Children	Expectant Mothers.	Children under one.	Children between the ages of one and five		Exp. Mos	Children	Exp. Mos.	Infants under one.	Children between 1 & 5 yrs.	Total	Under one year of age	Between the ages of 1 and 5 yrs.
39. Farsley, United Methodist Church	Weekly	Tues. 2—4	—	40	3	65	14	Part-time Medical man	4	529	4	964	921	1885	50	125
40. Ferrybridge (Pontefract R.D.), Wesleyan Chapel ... ..	Do.	Wed. 2—4	—	48	8	80	9	Do.	8	721	18	1800	574	2374	48	162
41. Garforth, St Mary's Hall ... ..	Do.	Mon. 2—4	9	76	71	64	6	Do.	257	2170	414	1122	2397	3519	57	141
42. Glasshoughton (Pontefract R.D.), St. Paul's Institute ... ..	Do.	Mon. 2—4	8	59	52	89	22	Part-time Medical woman	166	1526	166	1606	1171	2777	67	145
43. Glusburn (Skipton R.D.), Glusburn Institute ... ..	Fortnightly	Tues. 2—4	—	45	—	44	38	Do.	—	730	—	314	723	1037	23	45
44. Golcar, Council Offices ... ..	Weekly	Wed. 2—4	—	40	12	64	12	Do.	30	1016	36	922	1147	2069	64	143
45. Greasborough, Town Hall ... ..	Do.	Mon. 2—4	2	23	26	34	70	Part-time Medical man	62	496	90	717	360	1077	37	65
46. Greetland, Clay House ... ..	Do.	Tues. 2—4	—	36	9	47	29	Do.	—	468	21	471	1180	1651	35	147
47. Guiseley, Baptist Church Oxford Road ... ..	Do.	Thurs. 2—4	11	38	57	68	19	Part-time Medical woman	132	862	132	834	1036	1870	59	165
48. Ilworth, Hall Green Baptist School ... ..	Do.	Tues. 2—4	—	22	6	47	10	Do.	10	453	13	422	589	1011	26	62
49. Hebden Bridge, Old Secondary School, Pitt Street ... ..	Do.	Wed. 2—4	4	22	13	55	8	Do.	44	509	52	710	322	1032	45	76
50. Hemsworth, Army Hut, West End Council School ... ..	Do.	Mon. 2—4	15	76	71	96	22	School M.I.	233	1227	163	2457	1056	3513	96	149
51. Hemsworth (Fitzwilliam) Church Hut ... ..	Do.	Tues. 2—4	20	71	106	113	20	Part-time Medical man	279	1295	411	2265	1081	3346	113	208
52. Hipperholme, Wesleyan Sunday School ... ..	Do.	Mon. 2—4	9	49	32	85	9	Part-time Medical woman	129	1132	129	1040	1236	2276	67	27
53. Holmfirth, Town Hall ... ..	Do.	Thurs. 2—4	—	24	12	77	26	Do.	27	685	29	628	546	1174	61	126
54. Horbury, Wesleyan Sunday School ... ..	Do.	Mon. 2—4	7	65	20	111	12	Part-time Medical man	20	1086	51	1099	1964	3063	92	154
55. Horsforth, St. Margaret's Hall ... ..	Do.	Wed. 2—4	5	73	14	130	15	Do.	56	441	92	2140	1501	3641	136	160
56. Hoyland, Miners' Welfare Institute ... ..	Do.	Tues. 2—4	15	138	46	136	22	Do.	509	1708	530	2256	4234	6490	48	195
57. Hoyland Common (Hoyland U.D.), Wesleyan Chapel ... ..	Do.	Thurs. 2—4	5	85	20	85	16	School M.I.	70	1379	253	1567	2778	4345	64	147
58. Ingleton (Settle R.D.), Literary Institute ... ..	Fortnightly	Tues. 2—4	—	26	4	26	9	Part-time Medical man	13	386	13	241	360	601	26	37
59. Kippax (Tadcaster R.D.), Trinity Methodist Chapel ... ..	Weekly	Tues. 2—4	—	39	16	30	18	Do.	28	1000	28	1200	620	1820	18	95

Child Welfare Centres and School Clinics.—continued.

Name and Address.	Sessions held weekly, fortnightly, etc.	Day and time of Meeting.	Av. Attendance per Session		Number who attended for the first time during 1934.			Present arrangements for medical supervision.	Total No. of Sessions held.	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1934.				Total No. of children who were in attendance at the Centre and who, at the end of the year were:—	
			Expectant Mothers.	Children	Expectant Mothers.	Children under one.	Children between the ages of one and five			Exp. Mos.	Children	Infants under one.	Children between 1 & 5 yrs.	Total Children	Exp. Mos.	Under one year of age	Between the ages of 1 and 5 yrs.
60. Kirkburton, Drill Hall	Fortnightly	Thurs. 2—4	—	25	8	27	11	Part-time Medical man	22	5	225	275	279	554	29	27	84
61. Kirk Sandall (Doncaster R.D.), Assembly Hall	Weekly	Thurs. 2—4	6	44	29	41	18	Do.	50	69	679	1233	986	2219	69	41	79
62. Knarborough, Fysche Hall	Do.	Tues. 2—4	—	44	5	62	17	School M.I.	45	21	1138	796	1195	1991	29	62	113
63. Knottingley, Secondary School, Chapel Street	Do.	Mon. 2—4	—	47	22	85	9	Part-time Medical man	48	28	723	1550	700	2250	28	54	165
64. Lepton, Liberal Club	Do.	Tues. 2—4	2	48	49	96	11	Do.	47	48	625	484	1781	2265	127	97	231
65. Linthwaite, Bungallow, 93, Manchester Road, Milsbridge	Do.	Tues. 2—4	9	34	39	59	11	School M.I.	48	114	966	867	790	1657	115	53	83
66. Maltby, Congregational Chapel,	Do.	Mon. 2—4	14	93	85	213	184	Part-time Medical man	47	180	633	2316	2090	4406	189	169	93
67. Marsden, Conservative Club	Do.	Thurs. 2—4	—	47	6	57	14	Do.	51	15	1070	1025	1367	2392	27	47	213
68. Meltham, Baptist Church	Do.	Tues. 2—4	10	49	42	54	4	Do.	47	116	294	651	1640	2291	116	54	132
69. Mirfield, Ings Grove	Do.	Friday 2—4	15	54	83	140	20	Part-time Medical woman	48	178	754	2026	579	2605	178	246	110
70. Micklefield (Tadcaster R.D.), Wesleyan Chapel	Fortnightly	Tues. 2—4	2	49	20	35	5	School M.I.	26	47	1173	356	924	1280	62	30	95
71. Moorends (Thorne R.D.), Wesleyan Chapel	Weekly	Tues. 2—4	9	43	62	151	—	Part-time Medical woman	50	164	1023	1965	200	2165	164	151	106
72. Normanton, Park Pavilion	Do.	Tues. & Thurs. 2—4	10	58	77	143	60	School M.I.	69	226	2590	3311	733	4044	226	150	43
73. Otley, Primitive Methodist Chapel, Station Road	Do.	Thurs. 2—4	5	60	28	122	5	Part time Medical man	51	64	481	1657	1413	3070	70	86	51
74. Oulton (Hunslet R.D.), Village Institute	Do.	Tues. 2—4	—	18	5	64	14	Do.	47	11	834	574	260	834	10	30	46
75. Outwood (Stanley U.D.), Church Institute	Do.	Mon. 2—4	9	46	52	68	4	Do.	48	111	1620	1531	707	2238	113	74	110
76. Oughtibridge (Wortley R.D.), Church Hall	Do.	Thurs. 2—4	—	32	5	27	10	Do.	51	8	1218	551	1098	1649	9	22	87
77. Penistone, "Shrewsbury" Methodist Chapel	Do.	Mon. 2—4	4	47	14	55	14	Part-time Medical woman	46	46	634	874	1307	2181	33	55	197
78. Queensbury, Cricket Pavilion	Do.	Tues. 2—4	10	50	24	88	20	Part-time Medical man	47	118	948	1981	386	2367	118	63	25
79. Rawmarsh, Spiritual Temple, Parkgate	Do.	Tues. 2—4	20	94	316	316	365	School M.I.	96	530	1431	4260	4806	9066	920	261	291
80. Ripon City, Alma House	Do.	Mon. 2—4	1	50	—	57	12	Do.	48	71	960	644	1742	2386	71	91	94
81. Royston, Wesleyan Sunday School	Do.	Wed. 2—4	—	121	13	93	19	Part-time Medical man	51	38	1117	3317	2868	6185	78	93	44

Child Welfare Centres and School Clinics.—continued.

Name and Address.	Sessions held weekly, fortnightly, etc.	Day and time of Meeting.	Av. Attendance per Session		Number who attended for the first time during 1934.			Present arrangements for medical supervision.	Total No. of Sessions held.	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1934.				Total No. of children who were in attendance at the Centre and who at the end of the year were	
			Expectant Mothers.	Children	Expectant Mothers.	Children under one.	Children between the ages of one and five			Exp. Mos	Children	Exp. Mos.	Infants under one.	Children between 1 & 5 yrs.	Total Children.	Under one year of age	Between the ages of 1 and 5 yrs.
82. Rossington (Doncaster R.D.), United Methodist Church	Weekly	Tues. 2—4	10	60	90	112	35	Part-time Medical man	47	248	716	244	2208	610	2818	91	163
83. Saddleworth, Mechanics' Institute, Uppermill	Do.	Wed. 2—4	1	62	14	88	9	Do.	50	21	515	49	908	2209	3117	67	77
84. Selby, Museum Hall, Park Street	Do.	Fri. 2—4	—	32	5	42	10	Whole-time M.O.H.	50	11	1039	30	728	966	1694	68	130
85. Settle (Settle R.D.), Wesleyan Sunday School	Do.	Thurs. 2—4	—	23	5	20	11	School M.I.	26	21	308	21	283	318	601	26	41
86. Sharlston (Wakefield R.D.), St. Luke's Hall	Do.	Tues. 2—4	—	44	2	63	3	Part-time Medical man	47	11	1293	11	1087	1001	2088	48	123
87. Silsden, Ambulance Station, Kirkgate	Fort-nightly Weekly	Tues. 2—4	—	32	2	37	19	Part-time Medical woman	25	3	311	5	209	584	793	17	36
88. Snaith (Goole R.D.), House, Market Place	Weekly	Thurs. 2—4	—	15	3	31	7	Part-time Medical man	51	11	793	11	236	535	771	31	63
89. Skipton, Wesleyan Methodist Sunday School, Water Street	Do.	Wed. 2—4	—	60	3	76	19	School M.I.	45	12	950	18	1121	1589	2710	76	143
90. Slaithwaite, United Methodist Sunday School, Carr Lane	Do.	Wed. 2—4	—	40	—	64	10	Part-time Medical man	50	—	896	—	967	1060	2027	69	94
91. Stainforth (Thorne R.D.), New Wesleyan Church	Do.	Tues. 2—4	15	69	69	125	10	Part-time Medical woman	47	142	1430	161	2984	252	3236	100	80
92. South Milford (Tadcaster R.D.), St. Mary's Schoolroom	Fort-nightly Weekly	Tues. 2—4	1	39	4	36	9	School M.I.	23	34	1037	34	400	637	1037	34	4
93. Sowerby Bridge, Allan House	Weekly	Tues. & Thurs. 2—4	8	36	56	118	49	Do.	96	111	2033	156	2224	1245	3469	236	260
94. Stannington (Wortley R.D.), Underbank Chapel	Do.	Wed. 2—4	—	38	11	31	12	Part-time Medical woman	51	29	1082	72	666	1299	1965	32	104
95. Stocksbridge, Mozart House, Deepcar	Do.	Tues. 2—4	—	37	15	77	18	Part-time Medical man	48	41	783	47	874	903	1777	79	157
96. Swallownest (Rotherham R.D.), Church Hall	Fort-nightly Weekly	Mon. 2—4	3	43	17	68	10	Part-time Medical woman	25	70	1086	70	878	208	1086	56	22
97. Swinton, Rock House	Weekly	Mon. & Wed. 2—4	10	53	85	195	3	Part-time Medical woman and man	96	265	1597	275	2961	2162	5123	108	124
98. Stanley, Zion Congregational Chapel	Do.	Mon. 2—4	11	31	60	66	20	Part-time Medical man	47	148	558	180	706	782	1488	66	103



Child Welfare Centres and School Clinics.—continued.

Name and Address.	Sessions held weekly, fortnightly, etc.	Day and time of Meeting.	Av. Attendance per Session		Number who attended the first time during 1934			Total No. of Sessions held.	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1934.				Total No. of children who were in attendance at the Centre and who, at the end of the year were:—	
			Expectant Mothers.	Children	Expectant Mothers.	Children under one.	Children between the ages of one and five		Exp. Mos.	Children	Exp. Mos.	Infants under one.	Children between 1 & 5 yrs.	Total Children.	Under one year of age	Between the ages of 1 and 5 yrs.
99. Swillington, (Tadcaster R.D.), Hui near church	Fort- nightly Weekly	Wed. 2—4	17	65	97	47	9	24	365	1561	384	480	1089	1569	41	98
100. Swinefleet, (Goole R.D.), Prospect House		Tues. 2—4	—	11	4	26	3	47	16	519	17	223	296	519	26	35
101. Tadcaster (Tadcaster R.D.), Shann House, Westgate	Fort- nightly Weekly	Tues. 2—4	1	51	6	48	6	25	25	748	25	423	849	1272	29	161
102. Thorne, (Thorne R.D.), Temperance Institute		Wed. 2—4	—	45	11	101	8	52	16	865	16	1408	961	2369	81	136
103. Thurcroft, (Rotherham R.D.), Miners' Welfare Institute	Do.	Mon. 2—4	10	36	42	36	—	47	80	390	80	1289	400	1689	80	42
104. Thurnscoe (West), Church Sunday School	Fort- nightly Do.	Mon. 2—4	14	50	82	96	—	24	190	304	196	1148	54	1202	82	31
105. Thurnscoe (East), Parish Hall		Mon. 2—4	—	37	5	72	4	22	6	238	10	690	112	802	50	29
106. Wales' (Kiveton Park R.D.), Methodist Chapel	Weekly	Mon. 2—4	—	29	7	88	78	48	2	305	10	774	622	1396	62	73
107. Wath, Wesleyan Assembly Hall	Do.	Mon. 2—4	—	73	5	78	—	47	—	823	30	1191	2223	3414	62	122
108. West Melton (Wath U.D.), Wesleyan Chapel	Do.	Tues. 2—4	18	74	104	105	18	47	336	877	336	1448	2050	3498	93	60
109. Wetherby (Wetherby R.D.), Wesleyan Sunday School	Do.	Thurs. 2—4	2	27	14	21	10	50	46	209	93	442	932	1374	19	31
110. Whiston (Rotherham R.D.), Church Institute	Fort- nightly	Thurs. 2—4	—	16	2	24	4	26	3	226	3	228	184	412	21	43
111. Whitwood, Memorial Hall	Weekly	Wed. 2—4	10	74	107	183	90	50	145	1313	145	2732	1000	3732	91	159
112. Wrenthorpe (Stanley U.D.), Church Sunday School	Do.	Thurs. 2—4	—	36	4	39	2	51	26	894	26	1001	847	1848	29	47
113. Worsborough, Wesleyan Sunday School, Worsborough Dale	Do.	Thurs. 2—4	14	111	85	181	25	51	300	2101	300	1782	3892	5674	123	200
114. Yeadon, Town Hall	Do.	Tues. 2—4	3	50	57	94	8	47	132	898	132	830	1515	2345	88	182

VOLUNTARY INFANT WELFARE CENTRES

Name and Address.	Sessions held weekly, fortnightly, etc.	Day and time of Meeting.	Av. Attendance per Session		Number who attended for the first time during 1934.				Present arrangements for medical supervision.	Total No. of Sessions held.	No. of Cases seen by Medical Officer		Total No. of attendances at Centres during 1934.				Total No. of children who were in attendance at the Centre and who, at the end of the year were:—		
			Expectant Mothers.	Children.	Expectant Mothers.	Children under one.	Children between the ages of one and five	Exp. Mos.			Children.	Exp. Mos.	Infants under one.	Children between 1 & 5 yrs.	Total Children.	Under one year of age	Between the ages of 1 and 5 yrs.		
1. Bentham (Settle R.D.), St. Margaret's Sunday School	Fort-nightly	Thur 2—4	—	10	2	5	1	Part-time Medical woman	17	4	86	9	51	125	176	9	2		
2. Bardsey (Wetherby R.D.), Guest House Rington Hill Estate	Do.	Tues. 2—4	—	20	1	19	3	Do.	23	10	302	14	280	170	450	17	5		
3. Kirkhamgate (Wakefield R.D.), Church Mission Room	Monthly	Wed.(1st & 3rd) 2—3	—	16	—	10	1	Do.	22	—	250	—	238	125	363	11	16		
4. Methley, Mickletown Institute	Weekly	Mon. 2—4	—	49	4	58	2	Part-time Medical man	45	4	605	32	735	1470	2205	31	45		
TOTAL ..			—	—	4101	9431	2587		5358	9881	104180	12087	143072	129209	272281	8,430	12,248		

### Attendances at Child Welfare Centres.

The total attendances at the child welfare centres show an increase of 21,691 infants compared with the previous year.

The number of expectant mothers seen by the medical officers increased by 2,646, and infants by 6,663. This is very gratifying and speaks well for the popularity of the Centres.

The number of expectant mothers and children who attended a Child Welfare Centre for the first time numbered 4,101 expectant mothers and 12,018 children (see preceding table), an increase over the year 1933 of 603 expectant mothers. There was a small decrease of children, numbering 180. The percentage of notified births represented in this number was 71·3% against 69·3% in 1933, while the percentage of expectant mothers was 32% against 26·9% last year.

The total attendances at the 118 Centres open in the County at the end of the year were 12,087 expectant mothers and 272,281 children, the average attendance per session being 11 and 51, against 7 and 47 respectively in 1933.

### Establishment of Infant Welfare Centres.

No new Centres were opened during the year, but progress was made towards opening Centres at Luddendenfoot, Shelf, Springhead and Sprotborough, and at the time of writing this report, Centres at the first three places had actually been provided and opened. The Centre at Sprotborough, which is to be attached to the new school now in course of erection there, will, it is hoped, be opened towards the end of 1935.

### Premises.

Arrangements for transfer to more commodious premises were made at Crigglestone, Kippax, Kiveton Park and Yeadon.

Additional sessions due to the provision of ante-natal clinics were arranged at Airedale, Allerton Bywater (ante-natal work transferred to other premises), Catcliffe, Chapeltown, Crofton, Darfield, Edlington, Hebden Bridge, Horbury, Saddleworth, Swallownest, Thurcroft (ante-natal work transferred to other premises), West Melton, Worsborough, West Thurnscoe, and Woodlands.

At Normanton an additional session was arranged for the infant welfare work to provide for mothers and babies attending from the St. John's district.

Alterations to premises were carried out at Airedale, Conisborough, Knottingley and Sowerby Bridge.

Additional heating was provided at the Bardsey and Earby Centres.

At Stocksbridge internal decorations were carried out and at Tadcaster electric light was installed.

### Medical Officers of Centres.

The following new appointments were made during the year:—

Name of Centre.	Medical Officer.
Bardsey.	Elizabeth Thompson.
Bentham.	Elizabeth Dowell.
Chapeltown. (Ante-natal Officer)	Enid F. Cook.
Crigglestone.	O. V. Burrows.
Crofton. (Ante-natal Officer)	Doris M. Ringrose.
Edlington do.	Marjorie Rushbrooke.
Hebden Bridge do.	Elizabeth Thompson.
Kiveton Park do.	Marjorie Rushbrooke.
Luddendenfoot.	C. S. Ogilvy.
Springhead.	Constance Dickson.
Thurcroft. (Ante-natal Officer)	Dora Chapman.

The following resigned their appointments:—

Name of Centre.	Medical Officer.
Crigglestone.	A. M. Duff.
Ingleton.	J. MacLeod.

### Work at Centres.

One nurse writes . . . "Talks to mothers have been given by doctor and nurse on Diphtheria, Measles, Breastfeeding, on Economical Cookery and 'Feeding the Family'."

At another Centre it is reported that "short talks are given by Nurse — ; these are not lectures, but talks which begin by being addressed to individual mothers and end by being discussed in groups among several members who express interest in the subject dealt with. In this way, more practical value is given than by scheduled talks when the mothers are unable to give individual attention owing to the babies becoming fidgetty."

Another report of almost identical purport is—"The mother herself is quick to ask for advice, and these individual or group chats with the nurse have more far reaching results than have the talks 'en bloc' when the children are too restless and the mothers too harassed to pay much attention."



Class of mothers availing themselves of these social services.

A comment is made on this as follows—"The mothers in this area sacrifice themselves for the husbands and children, therefore we get a fair amount of anæmia in the mothers. Our trouble, though, is getting the really needy ones to attend the Ante-natal Clinic. Most of the cases who have attended during this last year are the wives of men earning a regular wage, not the ones on the dole."

Another writes—"I find that a good many of my mothers are listening to B.B.C. talks. The B.B.C. send me a printed list of future talks which I pin on the clinic blackboard. This year's booklet 'Twenty-four hours food' has been very popular with the mothers. We bought eight dozen copies through the Welfare Committee and they sold easily."

The nurse in charge of the Snaith Centre says that some mothers from the surrounding rural areas "have a walk of five to seven miles" while others come by bus from places three or four miles away.

Another quotation of some length. "The individual talk with the mother is . . . the greatest value of our work but it is being crowded out by the popularity of the clinic, . . . it is not (now) possible to give the same individual teaching; conditions are all against it; speaking to mothers 'en bloc' in a crowded clinic is very difficult and it is doubtful if what good is done is worth the great effort."

### Award of Bursarships for Intending Nurses.

To assist in the recruitment to the nursing service the Education Committee agreed to the award of Bursarships to girls in attendance at Secondary Schools who have reached the age of 16 years and wish to become nurses.

A Bursarship provides the whole or some portion of the tuition fees, games subscriptions, charges for the use of books, and necessary travelling expenses if the holder lives more than two miles from the school attended, and will ordinarily be tenable at a Secondary School for two years, so as to enable the holder to continue at school until old enough to serve as a probationer nurse. A maintenance allowance may be granted if need be shown.

Full details of the scheme appeared in the annual report for 1932.

The procedure adopted on the conclusion of the award of Bursarships is as follows:—

- (1) The Education Department keeps a record of each bursar.
- (2) The Education Officer notifies the County Medical Officer each year of the bursars who are due to enter hospitals and includes in the list names of applicants for Bursarships who were advised to continue with their existing awards and others who were not given awards on grounds of financial circumstances.
- (3) The County Medical Officer communicates with the bursar and advises as to entry to hospital where necessary.
- (4) The County Medical Officer notifies the Education Officer (a) as each bursar has been attached to a hospital for general training and (b) of any other movements.
- (5) The Education Officer informs the County Medical Officer in December or thereabouts whether or not the whole of the bursars who terminated their awards in the previous July have been satisfactorily settled.
- (6) The County Medical Officer keeps in touch with each probationer during training.

The following table gives information regarding awards already made.

Year of award	Number of awards made	Number who have entered upon their hospital training
1931-32	Nine	Nine
1932-33	Nine	Eight
1933-34	Eight	Four up to the time of writing.
1934-35	Six	

Ten awards have been offered for the school year 1935-36.

### Inspectors of Nurses and Midwives.

There are two women Inspectors of Nurses and Midwives. The following is a summary of their work during the year:—

Visits made to whole-time Health Visitors and Tuberculosis Nurses	...	418
„ part-time Nurses	... ..	64
„ Maternity Homes	... ..	15
„ Midwives	... ..	467
„ Child Welfare Centres	... ..	163
„ Boarded-out Children	... ..	30
„ in connection with Public Assistance Institutions	... ..	12
Special Visits (ophthalmia neonatorum, puerperal fever, uncertified practice, concealment of birth, abortifacients, pemphigus and deaths of children)	...	63

Attendance at meetings of local Child Welfare Committees and with Nursing Associations, and interviews with Medical Practitioners and various people relative to the Maternity and Child Welfare scheme	... ..	151
Premises inspected as to their suitability for Child Welfare Centres	...	38

The two Inspectors also gave addresses to mothers at Child Welfare Centres, attended celebrations in connection with Baby Week, assisted the County Superintendent of the West Riding Nursing Association in the formation of new Nursing Associations; made special investigations into cases arising under the Children and Young Persons Act, 1932, enquired into cases of pemphigus neonatorum, puerperal fever and pyrexia, special investigation into the practice of midwives, etc.

Much time was also taken up by one of the Inspectors in conferring with matrons of hospitals in connection with the training of nurses, appointments of sister-tutors, etc., investigating complaints at County Public Assistance Institutions, and in all, 12 visits were made.

Miss Houghton, the Superintendent of the West Riding Nursing Association and the two Inspectors work in complete harmony, and this tends to the smooth running of the various affiliated Nursing Associations in the Riding.

### **Widows', Orphans' and Old Age Contributory Pensions Act, 1925.**

The County Council is the Local Authority under the above Act for certain administrative purposes.

The duties to be performed by the Local Authority necessitate enquiry as to the conduct of widows in relation to the desertion, abandonment or non-support of children.

The County Council decided that, having regard to the nature of the enquiries, it was thought desirable that they should be undertaken by women, and accordingly any investigations are carried out by the two women inspectors. In every case the report of the Health Visitor in the area is also considered. No investigations were made during 1934.

### **Supply of Milk to Expectant and Nursing Mothers and Children under Five Years of Age.**

The County Council's scheme for the distribution of milk is as follows:—Dried milk only is supplied because of its convenience in handling, its concentration and the greater ease of recovering payments. It is supplied free or at less than cost price for:—

- (a) Children up to three years of age and exceptionally to children between three and five years.
- (b) Nursing mothers, and
- (c) Expectant mothers during the last three months of pregnancy.

Ordinarily a 1-lb. carton per week (equivalent to five and a half pints of fresh milk) is supplied, but where considered necessary, three cartons may be supplied per fortnight. It is supplied free or at a reduced price in necessitous cases:—

- (a) In districts having a Child Welfare Centre where the Medical Officer of the Centre is of opinion that a supply is essential "on grounds of health."
- (b) In districts where there is no Centre when the local Medical Officer of Health is of opinion that a supply is essential "on grounds of health."

A special Sub-Committee deals with all applications for a supply of dried milk free or at less than cost price, to review circumstances of all people making application, and all authorisations for such supplies.

The Committee determine the degree of "necessity" in each case and have adopted a fixed scale of income below which dried milk could be distributed free or at less than cost price.

The following scale of family income has been adopted by the Committee as a guide to the supply of dried milk free, or at less than cost price, viz:—

Where the net weekly income of the family, after deducting 5/- for each child under 14 years of age, does not exceed 30/-, the County Council provide dried milk free.

Where the net weekly income of the family, calculated as above, is over 30/-, but does not exceed 40/-, the County Council provide dried milk at half the usual price.

Where the net weekly income of the family, calculated as above, exceeds 40/-, the applicant must pay the usual price for dried milk.

In ascertaining the weekly income of the family, the average earnings for the four weeks prior to the application is taken.



All applicants in necessitous cases are required to fill in a form showing the income of the family from all sources, number of children under 14 years of age, name and address of employer and the signature of the father is required to the statement.

The certificate of the Medical Officer that milk is needed on "grounds of health" is valid for four weeks and may be renewed where the applicant's family circumstances have not improved. Each applicant signs a receipt in the space provided on the form. Stock books, vouchers, etc., are kept and stock is taken quarterly.

The following statement prepared by the West Riding Treasurer gives particulars regarding the sales and issues of dried milk at less than cost price at the various distribution centres in the County during the financial year ended 31st March, 1935, together with a comparison of the issues during the previous year.

CARTONS OF MILK.										1934-35	1933-34
Stock on hand at beginning of year	...	...	...	...	...	...	...	...	...	19,101	19,975
Received during the year	...	...	...	...	...	...	...	...	...	251,565	236,087
										<u>270,666</u>	<u>256,062</u>
ISSUES during year	...	...	...	...	...	...	...	...	...	248,242	236,961
Stock on hand at end of year	...	...	...	...	...	...	...	...	...	<u>22,424</u>	<u>19,101</u>
COST OF THE SERVICE.										£	£
ISSUES during year	...	...	...	...	...	...	...	...	...	14,481	13,823
Services of—											
County Supplies Department	...	...	...	...	...	...	...	...	...	672	572
Divisional Clerks, Nurses, etc.	...	...	...	...	...	...	...	...	...	300	300
Carriage, postage, etc.	...	...	...	...	...	...	...	...	...	<u>21</u>	<u>22</u>
										15,474	14,717
Cash received in respect of issues:—											
				1934-35	1933-34						
				s.d.							
Cartons at 1/5	...	...	...	110,784	101,485	7,847				7,188	
do. 8½	...	...	...	2,372	2,093	84				74	
do. free	...	...	...	135,086	133,383	—				—	
				<u>248,242</u>	<u>236,961</u>					7,931	7,262
Net cost of the service...										<u>£7,543</u>	<u>£7,455</u>

### Verification of Family Circumstances.

A scheme for the verification of family circumstances in connection with all forms of relief granted by the County Council was put into operation in the Lower Agbrigg Guardians Committee area for an experimental period on the 1st January, 1934.

The following fourteen Child Welfare Centres are established within the selected area and in every case, whether the applicant is working or otherwise, the family circumstances are verified before milk is issued at less than cost price:—

Altofts, Ardsley East, Ardsley West, Crigglesstone, Crofton, Lepton (Flockton cases only), Horbury, Kirkhamgate, Normanton, Oulton, Outwood, Sharlston, Stanley, Wrenthorpe.

The following are the results achieved during the year:—

	No. forwarded for Verification	No. found incorrect as affecting Scheme.	Percentage incorrect as affecting Scheme.
Applications for supply of milk at Centres ...	1,286	114	8.9
Maternity Home Treatment ...	105	20	19.1
Midwives fees in necessitous cases ...	182	25	13.7
Applications for Virol at school clinics ...	62	4	6.4
Provision of Spectacles, etc. ...	51	3	5.9
Clothing and Travelling Expenses for tuberculosis patients ...	48	—	—

During 1933, 15,246 1-lb. cartons of dried milk were issued free at these Centres and during 1934, when the verification of incomes operated, this total fell to 13,113, or 2,133 cartons less than the corresponding period last year. As regards Virol, during 1933 free issues amounted to 1,281 lbs.; in 1934 the issues dropped to 886-lbs.

When the scheme was instituted in January 1934, the percentage of incorrect forms as affecting the scheme for the supply of milk at Child Welfare Centres, was 18.5, and during the last quarter of the year was practically "Nil."

In regard to a large number of incorrect returns it should be noted that bona fide mistakes had been made owing to misunderstandings of various kinds.



## Dental Treatment of Expectant and Nursing Mothers.

Dental treatment is provided by the County Council for expectant and nursing mothers attending Child Welfare Centres and Ante-natal Clinics, who are not eligible for dental treatment from any other service, provided that such treatment is certified by the Medical Officer of the Child Welfare Centre or Ante-natal Clinic to be necessary.

Arrangements are made for treatment, including provision of dentures, with dentists approved by the County Medical Officer. The patient is allowed the choice of dentist in the district where she resides, and the treatment is carried out and paid for by the County Council in accordance with the scale approved by the Dental Benefit regulations made by the Minister of Health and the National Health Insurance Joint Committee for the use of Approved Societies under the National Health Insurance Acts.

The cost of treatment is recovered from the patients, but in necessitous cases the cost is paid by the County Council, according to the following scale.

### SCALE OF PAYMENT.

Where the total family income, after deducting 5/- for each child under 14 years of age and not working	Amount payable by patient	Amount payable by County Council
Does not exceed 30/- per week	Nil	Whole Fees
Is between 30/- and 50/- per week	Half Fees	Half Fees
Exceeds 50/- per week	Whole Fees	Nil

Where exceptional cases exist which render the payment of a whole or the portion of the fee a hardship, the case is specially reported to the Committee.

## Distress Fund.

In 1924, the County Council passed the following resolution:—

“That one year’s interest on the capital sum representing the balance of the West Riding “Distress Fund be applied by the County Council, through their Public Health and Housing Committee, towards the alleviation of cases of distress disclosed in connection with the work of the “Child Welfare and Tuberculosis Sub-Committees.”

During the year, the Child Welfare Sub-Committee approved of an expenditure of £114 8s. 6d. out of this fund to assist destitute cases as follows:—Fares to hospitals £58 14s. 10d.; provision of abdominal belts, £14 1s. 9.; provision of clothing £2 6s. 4d.; payment for massage treatment at Hospitals, £18 9s. 6d.; and provision of surgical appliances, £20 16s. 1d.

## Children and Young Persons Act, 1932 (Part V).

Visits are made monthly and in cases where the Infant Protection Visitor is not satisfied with the condition of a child or the home, and where any irregularity occurs, the circumstances are reported immediately and investigations made by the Assistant County Medical Officer or one of the Inspectresses.

The following Return relates to the administration of Part I of the Children Act, 1908, as amended by Part V of the Children and Young Persons Act, 1932, during the year 1934.

### 1. Notification:—

- (i) Number of foster parents on the Register at the end of the year ... 172
- (ii) Number of children on the Register
  - (a) at the end of the year ... 228
  - (b) who died during the year ... 2
  - (c) on whom inquests were held during the year ... —

### 2. Visiting:—

- (i) Number of Visitors holding appointments under Section 2 (2) at the end of the year:—
  - (a) Health Visitors ... 112
  - (b) Female, other than Health Visitors ... 2
  - (c) Male ... 2
- (ii) Number of persons or societies authorised to visit under the proviso to Section 2 (2). none

3. No proceedings were taken during the year under the various Sections of the Act.

4. No sanctions were given under Section 3 (a) (b) and (c) during the year.

5. No orders were obtained during the year under Section 5 (1) from a Justice or from the Local Authority.

During the year 1934, the Infant Protection Visitors made 500 visits to children notified as being nursed for reward.

In November, 1932, the Ministry of Health issued Circular 1291 and Memoranda 165/M.C.W. and 165a/M.C.W. amending the law relating to Infant Life Protection and summary of the law relating thereto for the guidance of Infant Protection Visitors under the Children and Young Persons Act, 1932.

The law relating to Infant Life Protection, which, since the passing of the Local Government Act, 1929, has been administered by Maternity and Child Welfare Authorities, is now contained in Part I of the Children Act, 1908, as amended by Part V of the Children and Young Persons Act, 1932 and the Second and Fourth Schedules to that Act.

The new Act came into operation on the 1st January, 1933 and the main alterations from the provisions of the Children Act, 1908 (Part I) are:—

1. For an extension of age of notifiable children from seven to nine years.
2. The period of notification, instead of being given 48 hours after reception is now as follows:—
  - (a) in the case of the first child proposed to be received, not less than seven days *before* its reception.
  - (b) any other child, not less than 48 hours *before* reception.
  - (c) a child already received without reward within 48 hours after the undertaking to receive for reward.
  - (d) change of residence, instead of 48 hours now at least seven days prior to the change.

### Birth Control.

In March and July, 1931, the Minister of Health issued Memoranda on the question of Birth Control and after consideration the County Council have decided to take action in this matter on the lines indicated by the Ministry's memoranda. In the memoranda it is pointed out that Local Authorities have no power to establish rate-aided birth control clinics and that their activities are restricted to the giving of advice through their medical officers at Child Welfare and Ante-Natal Clinics, and to the provision of appliances in those cases where it is considered undesirable on the grounds of health that certain *married women* should give birth to children. Having regard to the acute division of public opinion on the subject of birth control, the Ministry have decided that no Departmental sanction which may be necessary to the establishment of such Clinics for expectant and nursing mothers shall be given except on condition that contraceptive advice will be limited strictly to *cases where further pregnancy would be detrimental to health*.

In June, 1934, four Central Clinics were opened, staffed by medical officers specialised in the work, and cases on "medical grounds" are referred by the medical officers of the 118 Child Welfare Centres and ante-natal clinics to these special clinics which are usually held once a month, or oftener if required.

During the six months the clinics have been working, 127 married women have received advice in contraceptive methods.

A small charge is made in cases where appliances are supplied, but in necessitous cases no charge is made.

The following reports submitted by the medical officers of Birth control clinics gives some idea of the type of case dealt with.

*Doncaster (Edenfield Maternity Home)—Dr. Agnes G. Bruce.* 38 cases.

The Clinic was commenced on June 27th and between that date and end of December, 1934, eight sessions were held.

At the end of December the total number of names on the records was 38. Of these, about two kinds had re-attended for further advice, or to report progress so that the total number of cases (old or new) seen by the end of the year was 63.

Every case was examined and appropriate advice given. In suitable cases contraceptive appliances were fitted. Most of the women were very poor, but where they could afford to pay, a small charge was made, to cover the cost of material supplied.

The attitude of the women was on the whole very encouraging. They were interested and anxious to benefit by the advice and help given. Up to date no cases have been reported where the materials used have failed. If, in the course of examination any abnormality or disease was found the case was referred to her own doctor or to the appropriate centre for treatment.

*Hipperholme.—Dr. Elizabeth Thompson.* 13 cases.

Dr. Thompson reports that all cases are supplied with contraceptive appliances and have been instructed in their use. They have had typewritten instructions and been asked to report again in 6 months' time. Thirteen women were seen at this Clinic during the period it was open in 1934.

1. Mother had 3 children within 3 years. Health giving way under the strain. Economic conditions very poor.
2. 4 children, fairly healthy. Valvular heart disease. In bed 11 weeks with heart trouble before and after last pregnancy.
3. Several children living. Moderately advanced pulmonary tuberculosis.
4. Seven children (2 very delicate), mother's health poor and home conditions poor.
5. Two healthy children, both delivered by cæsarian section. Contracted pelvis.
6. One healthy. Epilepsy worse since child was born and having attacks weekly.
7. Mother aged 34. Children aged 11, 10, 8, 6, 5, 3, 2 and miscarriage followed by menorrhagia. ?Tuberculosis. Husband unemployed.
8. Children, 10, 8, 5, 3 and 5 months. Had pneumonia with third child. White leg with last child. Anæmic.
9. Four children, 3, 2, 1 and 4 months. Very anæmic.
10. First child, forceps, stillborn, 2 cæsarians. In hospital three weeks for heart failure; dyspnœa.
11. Four children, 5, 4, 3, 1. Too frequent pregnancies. Anæmic.
12. Three children, healthy. Contracted pelvis. Labour induced in all cases.
13. Three children, normal. Recent miscarriage has left mother in bad health. Poor circumstances.

*Leeds (Maternity Hospital)—Dr. Rhoda Adamson.* 11 cases.

Since the opening in June 1934 only eleven patients have been referred to this clinic. Dr. Adamson reports that the patients uniformly suffered from irregularity of cervical contour from lacerations in previous pregnancies.

*Swinton (Rock House)—Dr. Doris Pindar.* 65 cases.

Dr. Pindar reports that in her examination of patients she found that in seven cases the women were pregnant and in 16 cases gynæcological conditions requiring treatment were found and the patients referred to their own doctors.

Difficult obstetric history, ill health, tuberculosis, kidney and heart disease, were the reasons for seeking advice.

In 16 of the cases where the husband was unemployed the average number of children was 8.75 and the average age of the mother 35.31.

Of the 7 tuberculous cases the average number of children per family was 5.4.

In 58 of the cases appliances were supplied.



Sanitary District.	Nett Births.	No. of Births (including Still-Births).	No. of First Visits.	No. of Re-Visits.	No. of Pre-Natal Visits.	No. of Special Visits (Ophthalmia, Neonatorum, etc.)	No. of Still-Births Notified.	No. of Deaths under one year.	Measles Cases Visited.	No. of Attendances at Infant Welfare Centres.			No. of visits to children under 5 years of age.
										Exp. Mothers.	Infants under one.	Children between 1—5 years.	
I.	2	3	4	5	6	7	8	9	10	11	12	13	14
I. URBAN.													
Adwick-le-Street	360	359	382	4623	78	403	16	27	—	488	1692	4075	—
Altofts	60	44	45	904	164	—	1	2	—	—	822	597	—
Ardley, East and West	132	97	128	1819	47	4	4	7	94	58	1800	1624	2
Baldon	150	78	108	419	5	—	1	6	—	3	600	477	1
Barkisland	23	10	24	239	19	4	—	2	—	20	1900	552	—
Barnoldswick	131	74	132	1067	56	88	4	8	2	—	—	—	—
Batley Boro*	453	262	—	—	—	—	—	20	7	267	2592	852	3
Bentley-with-Arksey	304	—	272	3814	98	113	13	23	—	—	—	—	—
Bingley*	287	32	—	—	—	—	—	9	—	26	1028	783	4
Birkenshaw	41	32	32	265	13	—	—	4	12	59	687	1284	1
Birstal	96	77	114	1200	20	25	3	5	—	—	—	—	—
Bolton-upon-Deane*	272	—	—	—	—	—	—	17	—	—	—	—	—
Brighouse Boro*	250	40	—	—	—	—	—	16	—	—	—	—	—
Burley-in-Wharfedale	59	40	50	798	43	1	—	2	—	—	—	—	—
Calverley	42	30	36	780	5	—	—	2	—	—	—	—	—
Castleford*	337	—	—	—	—	—	—	26	—	—	—	—	—
Clayton West	18	17	19	269	57	—	1	—	—	—	—	—	—
Coleburn	399	376	481	2487	350	100	17	32	—	338	6509	3436	—
Cudworth	208	204	224	1234	40	23	6	15	—	382	2606	1015	—
Darfield	92	82	92	1877	7	11	7	16	6	192	3193	5409	2
Darton	268	257	247	3742	58	6	7	2	—	44	305	340	—
Denby and Cumberworth	41	33	10	556	132	10	2	2	5	85	1472	1376	—
Deholme	33	28	39	835	37	41	3	8	28	167	1220	994	—
Dodworth	77	79	82	999	48	6	4	—	4	48	788	1011	—
Drighlington	46	58	50	567	38	8	—	2	4	85	1038	1521	—
Earby	57	40	41	692	25	32	1	7	—	—	—	—	—
Elland	117	54	143	2213	36	—	1	1	—	4	964	921	—
Emley	17	15	19	346	47	—	2	3	88	—	—	—	—
Farsley	66	47	60	1296	6	—	—	18	—	—	—	—	—
Featherstone*	251	15	19	600	54	3	2	7	—	—	—	—	5
Flockton	14	39	37	661	127	2	3	3	—	414	1122	2397	69
Garforth	52	39	78	498	12	91	1	8	—	36	922	1147	—
Gildersome	112	42	119	2156	40	—	—	27	—	90	717	360	—
Goole*	363	44	30	226	6	—	—	6	4	21	471	1180	—
Greasbrough	63	49	49	1057	21	21	1	2	—	132	834	1036	—
Greenland	49	27	73	283	3	2	2	4	—	—	—	—	—
Guisley	79	56	—	—	—	—	—	—	—	—	—	—	—
Guthwaite & Ingirchworth	2	—	—	—	—	—	—	—	—	—	—	—	—
Harrogate Boro*	442	28	55	2148	22	3	—	21	23	13	422	589	4
Haworth	47	60	49	522	2	—	—	2	—	52	710	322	—
Hebden Bridge	67	—	—	—	—	—	—	7	—	—	—	—	—
Heddon	47	—	—	—	—	—	—	21	—	—	—	—	—
Heddonwike*	111	—	—	—	—	—	—	7	—	574	4722	2137	—
Hemsworth	301	281	362	2246	5	9	7	2	—	129	1040	1236	—
Hipperholme	56	31	44	808	5	—	—	8	—	29	628	546	—
Holme	2	—	4	29	42	4	6	—	2	—	—	—	—
Holmfirth	89	126	85	1562	42	8	—	—	6	51	1099	1964	—
Honley	59	36	55	958	36	5	8	14	—	92	2140	1501	—
Horbury	128	122	133	998	42	38	2	12	—	783	3823	7012	—
Horsforth	175	192	180	802	42	99	10	16	6	—	—	—	—
Hoyland Nether	237	217	270	1586	97	—	—	—	—	—	—	—	—
Hoylandswaine	9	7	11	158	7	2	1	1	1	—	—	—	2
Hunsworth	17	8	16	106	2	—	—	36	—	—	—	—	—
Ilkley*	111	—	—	—	—	—	—	2	—	—	—	—	—
Keighley Boro*	535	32	34	788	6	—	1	4	—	—	—	—	—
Kirkburton	33	16	44	519	58	2	2	1	—	29	275	279	1
Kirkheaton	37	99	97	626	2	1	7	4	—	29	796	1195	8
Knarborough	80	99	97	626	2	1	7	4	—	28	1550	700	1
Knottingley	157	142	109	634	15	6	3	7	—	127	484	1781	—
Lepton	43	28	36	156	12	3	3	8	—	115	867	790	—
Lidhwaite	107	58	95	1253	16	2	—	—	—	—	—	—	—
Luddenden Foot	36	16	28	1008	168	37	2	16	—	189	2316	2090	10
Maltby	281	224	274	2225	54	3	1	3	4	27	1025	1367	—
Marsden	62	44	59	1582	57	3	2	9	6	116	651	1640	—
Methley	54	49	55	695	7	1	2	13	—	32	735	1470	—
Mexborough*	86	59	76	1110	11	—	—	—	—	—	—	—	—
Morley	271	10	13	474	—	1	2	1	—	178	2026	579	—
Morley Boro*	176	158	194	3072	17	17	10	8	—	—	—	—	—
Mytholmroyd	44	37	49	1364	64	—	4	1	—	—	—	—	—
New Mill	41	17	44	1530	21	7	1	2	—	—	—	—	—
Normanton	231	212	261	2494	20	18	11	11	—	226	3311	733	—
Oakworth	53	29	29	480	71	—	—	10	1	70	1657	1413	17
Ossett Boro*	211	—	—	—	—	—	—	9	—	33	874	1307	3
Otley	154	108	172	1108	52	21	1	9	—	—	—	—	—
Oxenhope	16	11	20	927	24	—	—	—	—	—	—	—	—
Penslone	43	45	40	832	40	—	—	14	—	—	—	—	—
Pontefract Boro*	367	—	—	—	—	—	—	5	2	118	1981	—	—
Pudsey Boro*	201	57	88	1121	90	75	—	5	447	920	4260	4806	8
Queensbury	79	24	34	166	2	1	10	4	—	71	644	1742	25
Rawdon													





PART IV.  
TUBERCULOSIS SCHEME.

DR. G. S. JOHNSTON.—Chief Clinical Tuberculosis Officer.

Mortality from Tuberculosis of the Respiratory System.  
(Pulmonary Tuberculosis).

Year	West Riding Administrative County						England & Wales Death- rate
	Total No. of Deaths			Death-rate per 1,000 of population			
	County	Urban	Rural	County	Urban	Rural	
1924	1066	824	242	0·70	0·73	0·62	0·84
1925	1081	826	255	0·70	0·72	0·65	0·83
1926	966	736	230	0·62	0·65	0·56	0·77
1927	981	739	242	0·65	0·68	0·57	0·79
1928	926	706	220	0·61	0·64	0·51	0·76
1929	1011	747	264	0·66	0·68	0·62	0·79
1930	876	673	203	0·57	0·62	0·46	0·74
1931	882	632	250	0·57	0·58	0·56	0·74
1932	806	617	189	0·52	0·57	0·42	0·69
1933	745	545	200	0·49	0·50	0·45	0·69
Average for 10 years, 1924-33	934	704	230	0·61	0·64	0·54	0·76
1934	671	513	158	0·44	0·47	0·35	0·64

Mortality from Other Forms of Tuberculosis.

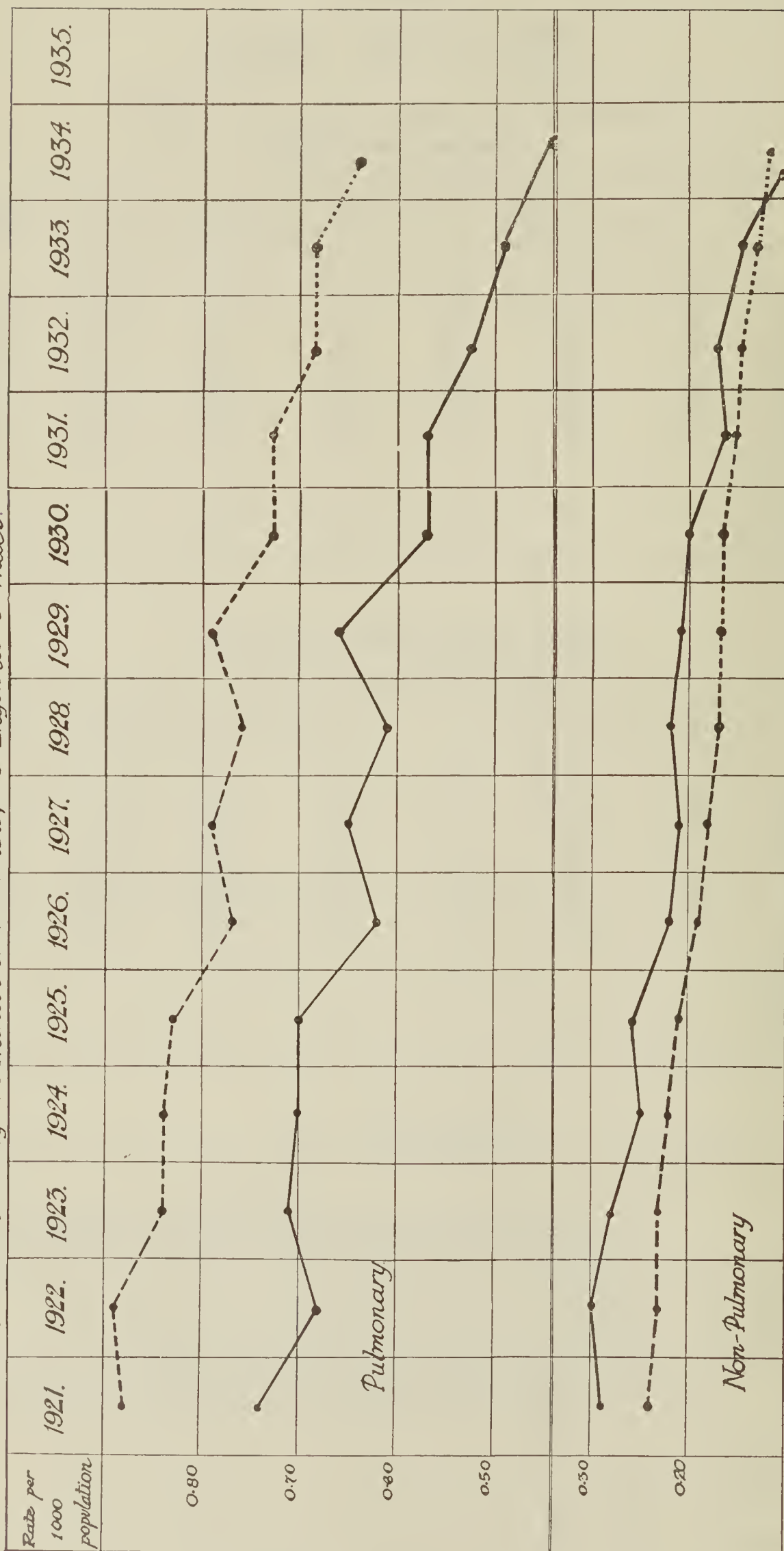
Year	West Riding Administrative County						England & Wales Death-rate
	Total No. of Deaths			Death-rate per 1,000 of population			
	County	Urban	Rural	County	Urban	Rural	
1924	380	279	101	0·25	0·25	0·26	0·22
1925	396	307	89	0·26	0·27	0·23	0·21
1926	348	258	99	0·22	0·23	0·22	0·19
1927	323	246	77	0·21	0·23	0·18	0·18
1928	342	246	96	0·22	0·22	0·22	0·17
1929	321	223	98	0·21	0·20	0·23	0·17
1930	309	213	96	0·20	0·20	0·22	0·16
1931	253	164	89	0·16	0·15	0·20	0·15
1932	264	182	82	0·17	0·17	0·18	0·15
1933	218	157	61	0·14	0·14	0·14	0·13
Average for 10 years, 1924-33	315	227	88	0·21	0·21	0·19	0·17
1934	181	131	50	0·12	0·12	0·11	0·13

Tuberculosis Deaths, 1934.

		Sex.	Age Groups.											All Ages
			Under 1 year	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 35	35 and under 45	45 and under 55	55 and under 65	65 and under 75	75 and upwards	
RESPIRATORY TUBERCULOSIS	Urban Districts	M.	—	1	—	1	38	57	58	73	35	24	2	289
		F.	—	—	1	2	70	67	29	29	14	9	3	224
	Rural Districts	M.	1	—	—	1	14	17	16	16	12	7	—	84
		F.	—	—	—	2	28	20	13	6	2	2	1	74
County	...	...	1	1	1	6	150	161	116	124	63	42	6	671
OTHER TUBERCULOUS DISEASES—	Urban Districts	M.	9	8	18	15	8	6	7	3	—	2	—	76
		F.	3	5	5	15	10	4	2	6	1	3	—	54
	Rural Districts	M.	—	3	3	3	2	3	3	4	2	1	1	25
		F.	—	5	6	6	1	2	1	1	2	1	1	26
County	...	..	12	21	32	39	21	15	13	14	5	7	2	181



CHART SHEWING MORTALITY FROM TUBERCULOSIS DURING THE YEARS 1921-1934  
in West Riding Administrative County & England & Wales.



WR Administrative County = Thick Black Line  
England and Wales = Broken Line

**Tuberculosis Mortality, 1934. Comparison of Dispensary Areas.**

Dispensary Area and Centre.	Estimated Population (mid. 1934)	DEATHS.				DEATH RATES PER 1000 ESTIMATED POPULATION		Percentage of deaths from Non-pulmonary Tuberculosis in children under 10 to total deaths from Non-pulmonary Tuberculosis (all ages)*
		Pulmonary		Non-Pulmonary		Pulmonary	Non-Pulmonary	
		M.	F.	M.	F.			
No. 1. (Skipton) ..	141,752	38	14	6	7	0·37	0·09	30·8
No. 2. (Harrogate)	158,945	26	32	3	6	0·36	0·06	33·3
No. 3. (Doncaster)	396,315	105	78	35	29	0·46	0·16	57·8
No. 4. (Barnsley) ..	476,296	118	91	31	22	0·44	0·11	54·7
No. 5. (Sowerby Bridge) ...	361,592	86	83	26	16	0·47	0·12	38·1
County Totals .	1,534,900	373	298	91	80	0·44	0·12	49·2

\* Compiled from returns of deaths from tuberculosis (all forms) obtained from Local Registrars of Births and Deaths.

### Notification of Tuberculosis.

Notifications received during the period 1922—1934 under the Public Health (Tuberculosis) Regulations.

Year.								Pulmonary Cases.		Non-Pulmonary Cases.		Total
								M.	F.	M	F.	
Average 5 years, 1922-1926								1321	1120	377	354	3172
" " 1927-1931								1142	886	429	360	2817
1932	...	...	...	...	...	...	...	693	591	286	264	1834
1933	...	...	...	...	...	...	...	770	606	276	247	1899
1934	...	...	...	...	...	...	...	663	530	290	266	1749

## Public Health (Tuberculosis) Regulations 1930.

Summary of Notifications during the period from the 1st January, 1934, to the 31st December, 1934, in the area of the County of Yorkshire, West Riding.

Age periods.					Formal Notifications												Total Notifications
					Number of Primary Notifications of new cases of Tuberculosis												
					0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	Total (all ages)	
Pulmonary	Males	...	...	...	—	5	37	22	60	72	146	123	113	68	17	663	701
	Females	...	...	...	—	11	33	43	56	96	146	65	51	20	9	530	550
Non-pulm.	Males	...	...	...	2	43	72	52	19	35	28	26	5	3	5	290	301
	Females	...	...	...	5	32	55	56	29	26	30	17	12	3	1	266	275

## PART II.—SUPPLEMENTAL RETURN.

New cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during the above-mentioned period, otherwise than by formal notification.

Age period.					0--	1 --	5—	10—	15—	20—	25—	35 —	45—	55—	65 -	Total
Pulmonary	Males	...	...	...	—	1	3	—	—	—	11	9	20	10	4	58
"	Females	...	...	...	—	—	5	1	10	13	15	3	4	6	5	62
Non-pulm.	Males	...	...	...	2	6	10	3	5	2	2	3	4	4	6	47
"	Females	...	...	...	1	10	7	2	3	2	5	—	3	3	3	39

The source or sources from which information as to the above-mentioned cases was obtained are given below :—

Source of Information.	No. of Cases	
	Pulm.	Non-Pulm.
Death Returns { from local Registrars ... ..	49	40
transferable deaths from Registrar General ... ..	19	19
Posthumous notifications ... ..	12	8
"Transfers" from other areas (other than transferable deaths) ... ..	39	19
Other sources ... ..	1	—

## PART III.—NOTIFICATION REGISTER.

	Pulmonary			Non-pulmonary			Total cases
	m	f.	Total	m.	f.	Total	
Number of cases of Tuberculosis remaining at the 31st December, 1934 on the Registers of Notifications kept by District Medical Officers of Health in the County.	5656	4161	9817	2437	2036	4473	14290
Number of cases <i>removed</i> from the Registers during the year by reason inter alia of:—							
1. Withdrawal of Notification ... ..	21	20	41	16	10	26	67
2. Recovery from the disease ... ..	244	179	423	167	129	296	719
3. Death ... ..	323	249	572	57	37	94	666

With reference to Part II—Supplemental Returns—it will be noted that the information regarding 120 cases of Pulmonary Tuberculosis and 86 cases of Non-pulmonary Tuberculosis was obtained otherwise than by formal notification.

## Notified Cases in the West Riding in December, 1933 and 1934.

	Pulmonary.		Non-Pulmonary.		Totals.
	Males.	Females.	Males.	Females.	
No. of cases on registers of local Medical Officers of Health at end of 1933 ... ..	5,769	4,268	2,488	2,062	14,587
New Cases notified in 1934 ... ..	721	592	337	305	1,955
Cases removed from registers during 1934 ... ..	834	699	388	331	2,252
No. of cases on registers of local Medical Officers of Health at end of 1934 ... ..	5,656	4,161	2,437	2,036	14,290

During the year many conferences took place between local Medical Officers of Health and Tuberculosis Officers to compare the notification registers. Names were added or removed by mutual consent, and the registers were brought up-to-date in many cases—see part III above.

The total number of primary notifications for 1934 was 1,749 as compared with 1,899 for the previous year. The number of notifications of new cases of tuberculosis coming to the knowledge of the Medical Officer of Health during 1934 otherwise than by formal notification, is shewn in Part II, Table VI.

## Dispensary Scheme.

The deaths from tuberculosis (all forms) in the county during 1934 totalled 852. Respiratory tuberculosis accounted for 671 deaths, representing a death rate of 0·44 per 1,000, and non-pulmonary deaths 181 with a rate of 0·12 per 1,000. These are the lowest rates on record for the administrative area. In the West Riding there has been a notable drop in the number of deaths from surgical tuberculosis in early childhood. In 1924, 98 deaths occurred in infants under two years, from surgical tuberculosis. In 1934 the figure was 33, or a drop of approximately 60%. Whilst in 1924 the total deaths at all ages from non-pulmonary tuberculosis numbered 380, in 1934 they were 181.

Under the Tuberculosis Regulations, notifications relating to 1,193 new cases of pulmonary tuberculosis were received during the year. 1,025 or 81·9% of these were referred to the dispensaries and examined by the dispensary medical staff. Of the pulmonary cases attending the dispensaries for the first time during 1934, 459 or 44·7% were found to have a positive sputum, and death occurred before the end of 1934 in 100 cases.

As has been mentioned in previous reports, before the re-organisation scheme and the introduction of X-Rays in 1931, the Dispensary registers were filled to overflowing with doubtful and negative cases. An inadequate dispensary staff was unable to cope with the numbers, especially in the industrial areas, and had neither the means nor the time to verify the diagnosis. X-Rays were non-existent. The result has been that since the inauguration of the new dispensary system consultants have been fully occupied in re-classifying old cases and setting their registers in order.

There is still a large number of negative cases in adults and children on the dispensary registers, but the work during the past year of weeding out has gone steadily on, has been most thorough, and the outlook is now more encouraging. During 1934, 1,019 cases were marked off “recovered” as compared with 804 in 1932. The number on the dispensary registers during 1934 was 10,132, in 1933 10,625, and in 1932 11,291. The number of T.B. + cases has gradually increased owing to a more vigorous search—1,512 in 1934 as compared with 1,153 in 1932. With continued effort the doubtful and negatives will be further reduced to a reasonable proportion. The degree of proficiency of a tuberculosis dispensary is in direct ratio to the extent of the co-operation between the practitioner and the Tuberculosis Officer. That the most satisfactory liaison exists between practitioners and Consultants in the West Riding is shown from the figures for the year 1934. The number of personal and other consultations has markedly increased.

There were 1,543 new applications for treatment and 1,931 old cases re-considered during 1934, as compared with 1,921 and 2,064 in 1931.



There has been a definite increase in the number of contacts examined. This also is a step in the right direction, for the earlier the case is seen and treated the more hopeful is the prognosis: but the idea of contact examination is carried out more from the point of view of prevention than treatment, and the Mantoux test in children is of considerable value in prevention. A vigorous search for contacts and the early treatment of phthisis, if judiciously and continuously applied, is bound to have very definite effect on the incidence and death-rate from tuberculosis in a community. Unfortunately there is still a large number of positive cases living under dangerous conditions and likely to cause spread of the disease. This applies more particularly to the crowded industrial areas. A glance at the environmental table will show that there is gross overcrowding in some parts of the Riding. Of the infectious pulmonary cases attending the dispensaries there were 62 patients from houses where more than one family reside, 381 instances where they slept two in a bed, and 10 cases where worse conditions prevailed. The obvious precaution, of course, is to insist on the removal of the infectious case, but a patient cannot be retained in sanatorium or hospital for the rest of his life. Pressure can be brought to bear under Section 62 of the 1925 Act if need be, but this procedure is not always practicable and is often undesirable. One energetic Care Committee in the Riding has arranged to board out children from infected households. The advantage of this plan is that the children live near their homes, and it appears to be popular for this reason.

As stated in previous reports there is discharged annually in the West Riding from Sanatoria and Hospitals a large number of sputum positive cases to homes where children or young adults are living.

The School Medical Service co-operates well with the Tuberculosis Dispensary, and during the year a large number of children were referred to the dispensary for treatment or for opinion. During 1934 this influx greatly added to the work of the dispensary and increased the number of X-Ray examinations. The number of patients screened and filmed has been increasing year by year—the X-Ray is now an indispensable part of the dispensary equipment. Besides controlling artificial pneumothorax treatment and the effects of gold treatment, a system of periodic X-Ray examination has been applied to patients in order to study the pathological changes of the lesions and to compare the findings with former clinical examinations. **Dr. Ryan**, Doncaster Dispensary Area, expresses the opinion that “serial X-Ray pictures are the best method of judging the course of the disease. A relapse is often anticipated by X-Ray examination before symptoms or signs give the warning. It is in fact never wasteful to re-X-Ray the case of established tuberculosis. On the other hand, an improvement in the X-Ray picture may be found when one is in doubt as to re-activity, as for instance when a hæmoptysis occurs and one is doubtful of the cause. So too, the final discharge of the patient recovered is made more confidently when one has a series of permanent records of X-Ray films to show the successive changes towards healing.”

The work carried out at the dispensaries may be summed up as follows:—

1. Examination of contacts and new cases sent by practitioners and school medical inspectors (which includes X-Ray examinations and Mantoux tests in children). During the year 3,960 X-Ray examinations were made in connection with dispensary cases.
2. Arranging for sanatorium or hospital treatment of phthisis, and institutional treatment of lupus and other forms of surgical tuberculosis.
3. Carrying out special treatment, such as artificial pneumothorax—over 250 refills were given last year at the dispensaries—tuberculin treatment, gold treatment, etc., in selected cases. Arranging for patients suitable for thoracoplasty, phrenic evulsion, etc. to be seen by surgeon specialist. Making investigation into necessitous cases. During the year 402 patients were given extra nourishment, and throughout the year the average number in receipt was 221.

Dispensary nurses attend during the sessions and keep record of the weight and progress of each patient and assist generally in the dispensary work. They arrange for escorts to accompany patients to sanatorium and hospital—train fares, etc., visit patients at their homes to advise and to see that the instructions of the Tuberculosis Officer are being carried out, enquire as to contacts and arrange for their attendance at the dispensary.

The death rate from pulmonary tuberculosis amongst young females, age group 15 to 25, is high in the West Riding as in other thickly populated parts of the country. The rapidity with which the disease advances is in many cases remarkable. It is no unusual occurrence for a patient to be examined at the dispensary, diagnosed incipient phthisis and recommended artificial pneumothorax, to be found a week or two later on admission to sanatorium an advanced case, and quite unsuitable for any form of treatment.

Dispensary attendances of old and new cases (including contacts) during the years 1930-1934 (inclusive):—

New cases examined:—

	1930	1931	1932	1933	1934
(a) Contacts	1,313	1,176	1,334	1,025	1,282
(b) Others	3,781	3,605	3,342	3,469	3,210
Attendances (all cases)	33,342	37,019	34,266	33,646	32,990

Of the applications for treatment during the year:—

1,442	were recommended Sanatorium Treatment
186	„ „ Hospital „
80	„ „ Dispensary „
1,313	„ „ Dispensary Supervision
453	„ referred to their own Doctor.

The total number of definite cases of tuberculosis on the dispensary registers on the 31st December, 1934, was 10,132.



Dispensary or Branch	Patients on Dispensary Register 1/1/34				Cases Transferred or lost sight of in 1934				Deaths reported in 1934				Patients on Dispensary Register 31/12/34			
	Diagnosis completed		Diagnosis not completed		Pulm.		Non-P.		Pulm.		Non-P.		Diagnosis completed		Diagnosis not completed	
	Pulm.	Non-P.	Pulm.	Non-P.	Pulm.	Non-P.	Pulm.	Non-P.	Pulm.	Non-P.	Pulm.	Non-P.	Pulm.	Non-P.	Pulm.	Non-P.
Area No. 1.																
Skipton	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Barnoldswick	121	32	6	2	10	3	8	4	12	1	108	30	1	—	—	—
Clitheroe	97	19	9	2	8	3	4	1	10	—	100	22	3	—	—	—
Otley	19	8	—	—	—	—	—	—	—	—	21	7	—	—	—	2
Settle	158	36	7	1	12	2	3	1	21	2	162	27	5	—	—	—
...	39	8	—	—	—	—	—	—	—	—	44	23	—	—	—	—
Area No. 2.																
Harrogate	133	75	3	—	14	7	6	4	18	—	149	86	5	—	—	1
Garforth	70	44	1	—	5	—	6	2	5	1	82	48	1	—	—	—
Ripon	22	11	2	—	—	—	—	3	3	—	28	17	—	—	—	2
Selby	36	25	3	—	1	—	2	1	4	—	39	35	6	—	—	3
Tadcaster	16	16	1	—	1	—	1	—	3	—	17	16	—	—	—	—
Area No. 3.																
Doncaster	579	164	15	3	67	19	118	23	40	3	533	178	50	—	—	10
Goldthorpe	366	150	13	—	16	8	6	7	11	—	328	134	31	—	—	1
Goole	236	67	20	1	9	2	32	17	18	1	195	60	19	—	—	1
Hemsworth	200	67	21	2	9	4	10	1	10	—	229	74	31	—	—	3
Mexborough	713	357	15	2	43	25	98	77	26	2	620	261	37	—	—	5
Pontefract	614	195	36	5	27	4	43	16	39	2	594	200	62	—	—	7
South Kirkby	218	73	14	2	23	6	23	6	12	1	221	91	26	—	—	7
Thorne	286	116	17	1	23	9	8	8	5	1	271	108	21	—	—	4
Area No. 4.																
Barnsley	590	237	36	10	11	8	40	33	43	5	556	233	29	—	—	12
Batley	150	64	6	—	3	1	1	4	14	—	144	64	2	—	—	1
Dinnington	221	87	7	2	9	1	14	7	5	—	206	84	9	—	—	1
Liversedge	107	34	4	1	1	—	3	1	16	—	112	46	5	—	—	2
Morley	103	50	9	—	—	—	3	1	8	—	110	53	3	—	—	—
Normanton	115	39	5	—	—	—	6	1	12	—	113	42	8	—	—	3
Penistone	47	19	3	1	3	—	1	1	4	—	46	19	1	—	—	—
Pudsey	62	32	5	1	5	2	—	1	5	—	76	36	4	—	—	1
Rotherham	683	284	27	5	19	7	23	50	29	1	667	256	24	—	—	3
Rothwell	65	26	4	—	3	1	—	—	1	—	70	31	3	—	—	—
Stocksbridge	140	47	1	1	2	—	4	1	4	—	136	57	3	—	—	2
Wadsley Bridge	127	76	3	—	4	12	2	12	12	—	128	64	5	—	—	1
Wakefield	241	84	6	3	5	1	24	7	21	3	220	82	11	—	—	3
Area No. 5.																
Sowerby Bridge.	96	68	2	2	3	4	4	4	18	2	106	71	21	—	—	1
Brighouse	70	38	2	—	4	—	15	7	8	1	51	37	3	—	—	—
Huddersfield	274	212	5	1	19	14	46	67	47	4	231	148	9	—	—	1
Keighley	209	73	5	—	8	8	27	15	24	1	199	66	23	—	—	4
Shipley	162	44	3	—	7	4	8	7	21	3	145	39	3	—	—	—
Todmorden	83	47	4	—	1	1	4	—	11	1	90	53	8	—	—	—
Uppermill	74	59	1	—	3	2	21	15	5	1	47	40	7	—	—	1
	7542	3083	321	48	379	159	614	405	547	39	7194	2938	479	—	—	82



# LIST OF TUBERCULOSIS DISPENSARIES, SHEWING DISPENSARY ADDRESSES AND TIMES OF SESSIONS (Revised July, 1934).

County Medical Officer: T. N. V. POTTS, M.D.

Chief Tuberculosis Officer: G. S. JOHNSTON, M.D.

Situation of Chief Dispensary or Branch.	Day and Time of Session	Sanitary Districts included in Area.	Medical Staff.
<b>AREA No. 1.</b> 54, Keighley Road, Skipton. Whiteley Croft, Otley.	Mondays, 10 a.m. Fridays, 10 a.m. Thursdays, 10 a.m. and 2 p.m.	Skipton U., Silsden U., Skipton R. Otley U., Ilkley U., Burley U., Guiseley U., Yeadon U., Rawdon U., Horsforth U., Wharfedale R.	<b>Consultant Tuberculosis Officer:</b> H. E. Raeburn, M.D., M.B., B.S. <b>Assistant Tuberculosis Officer:</b> E. A. Wilson, M.D., M.R.C.S., L.R.C.P.
2, Manchester Road, Barnoldswick 32a, King Street, Clitheroe. St. John Ambulance Rooms, Settle.	Tuesdays, 10 a.m. and 2 p.m. Last Wednesday in month, 11-30 a.m. First Wednesday in month, 11 a.m.	Barnoldswick U., Earby U., Bowland R. (part). Bowland R. (part). Settle R., Sedbergh R.	
<b>AREA No. 2.</b> 10, North Park Road, Harrogate	Tuesdays & Thursdays 2 p.m. ;	Harrogate B., Knaresborough U., Knaresborough R., Pateley Bridge R., Wetherby R., Great Ouseburn R.,	<b>Assistant Tuberculosis Officer:</b> G. A. Crowley, B.A., M.D., B.Ch., D.P.H.
44, Ousegate, Selby. Child Welfare Centre, Westgate, Tadcaster. 4, College Road, Ripon.	Mondays, 10 a.m. First Friday in month, at 10-30 a.m. First and Third Thursday in month, 10 a.m.	Selby U., Selby R. Tadcaster R. (part), Bishopthorpe R. Ripon C., Ripon R.	
14, Hilderthorpe Terrace, Garforth.	Second and fourth Friday in month, 10-30 a.m.	Garforth U., Tadcaster R. (part)	
<b>AREA No. 3.</b> Merton House, 20, Christchurch Road, Doncaster.	Mondays, 2 and 7 p.m.	Adwick-le-Street U., Bentley U., Tickhill U., Doncaster R. (less Denaby and Adwick) Goole U., Goole R. Thorne R.	<b>Consultant Tuberculosis Officer:</b> V. Ryan, M.D., M.B., B.Ch., B.A.O., D.P.H.
37, Hook Road, Goole Thorne Hall, Thorne The Lindens, Linden Terrace, Tanshelf, Pontefract.	Mondays, 10-30 a.m. Fridays, 10 a.m. Tuesdays, 2 & 6-30 p.m.	Pontefract B., Methley U., Featherstone U., Whitwood U., Castleford U., Knottingley U., Pontefract R. Mexborough U., Conisborough U., Swinton U., Wath U., Denaby and Adwick Parishes.	<b>Assistant Tuberculosis Officers:</b> A. Leitch, M.B., Ch.B., D.P.H. T. W. Ruttledge, M.B., Ch.B., D.P.H.
Exchange Buildings, Market Street, Mexborough 8, Goldthorpe Road, Goldthorpe Plimsoll Street, Hemsworth The Green, South Kirkby	Wednesdays, 10 a.m. Thursdays, 10 a.m. Thursdays, 10 a.m. Fridays, 10 a.m.	Bolton-on-Deane U., Thurnscoe U. Hemsworth U. Hemsworth R. (part) Hemsworth R. (part)	
<b>AREA No. 4.</b> 46, Church Street, Barnsley.	Weds., 10 a.m. & 2 p.m. Fridays, 10 a.m.	Cudworth U., Darfield U., Darton U., Dodworth U., Hoyland Nether U., Royston U., Wombwell U., Worsborough U., Barnsley R.	<b>Consultant Tuberculosis Officer:</b> H. A. Crowther, M.A., M.R.C.S., L.R.C.P.
Wesleyan Sunday School, Penistone	First Thursday in month, 10 a.m.	Penistone U., Gunthwaite U., Hoylandswaine U., Thurlstone U. Penistone R.	
5, Almshouse Lane, Wakefield The Park Pavilion, Normanton Isolation Hospital, Rothwell Branch House Chambers, Batley	Tuesdays and Fridays, 2 p.m. Tuesdays, 10 a.m. Mondays, 10 a.m. Thursdays, 2 p.m. *Second Tuesday in month at 6 p.m.	Horbury U., Stanley U., Wakefield R., Ossett B. (part) Altofts U., Normanton U. Rothwell U., Hunslet R. Batley B. Hunsworth U., Ossett B. (part), Birstall U., Birkenshaw U.	<b>Assistant Tuberculosis Officers:</b> E. J. C. Groves, M.B., Ch.B. J. Wood-Wilson, M.D., D.P.H. S. P. Wilson, M.D., D.P.H.
Wellington House, High Street Morley Old Town Hall, Knowler Hill, Liversedge Wesley Chambers, Lidgett Hill, Pudsey Carnson House, Moorgate Road, Rotherham 162, Lorden's Hill, Dinnington Urban District Council Offices, Stocksbridge 102, Parson Cross Rd., Wadsley Bridge.	Thursdays, 10 a.m. Fridays, 10 a.m. Tuesdays, 2 p.m. Fridays, 10 a.m. and 2 p.m. Tuesdays, 10 a.m. Mondays, 2 p.m. Thursdays, 10-30 a.m.	Morley B., Gildersome U., Ardsley E. and W. U., Drighlington U. Spenborough U., Heckmondwike U. Calverley U., Farsley U., Pudsey B. Greasborough U., Maltby U., Rawmarsh U., Rotherham R. Kiveton Park R. Stocksbridge U., Wortley R. (part) Wortley R. (part)	
<b>AREA No. 5.</b> Myrtle Villa, Greenups Terrace, Sowerby Bridge	Tuesdays, 10 a.m. Thursdays, 2 p.m.	Sowerby U., Barkisland U., Greetland U., Luddendenfoot U., Midgley U., Rishworth U., Scammonden U., Soyland U., Stainland U., Queensbury U. Halifax R.	<b>Consultant Tuberculosis Officer:</b> S. R. Wilson, M.D., M.B., Ch. B., D.P.H.
Masonic Hall, Todmorden	Fridays, 2 p.m.	Todmorden B., Mytholmroyd U., Hebden Bridge U., Todmorden R.	<b>Assistant Tuberculosis Officers:</b> J. E. Gething, B.A., M.B., Ch.B.
143, Skipton Road, Keighley	Mondays, 2 p.m., and Wednesdays, 1 p.m.	Keighley B., Keighley R., Haworth U., Oakworth U., Oxenhope U., Denholme U.	A. D. Rankin, M.B., Ch.B., D.P.H.
1, Peel Street, Huddersfield	Tuesdays, 2 p.m. Fridays, 2 p.m.	Emley U., Flockton U., Golcar U., Linthwaite U., Thurstonsland and Farnley Tyas U., South Crosland U., Lepton U., Whitley Upper U., Kirkburton U., Kirkheaton U., Skelmanthorpe U., Mirfield U., Shelley U., Shepley U., Clayton West U., Denby and Cumberworth U., Holme U., Honley U., Holmfirth U., New Mill U., Marsden U., Meltham U., Slaithwaite U.	
Court Street, Uppermill	Alternate Thursdays, 10 a.m.	Saddleworth U., Springhead U.	
Mill House, Bradford Road, Brighouse	Fridays, 10 a.m.	Brighouse B., Hipperholme U., Elland U., Shelf U., Southowram U.	
1A, Kirkgate, Shipley	Mondays, 10 a.m.	Baildon U., Bingley U., Shipley U.	

\* Held at Staincliffe Institution.

## Applications for Treatment, 1934.

	Kind of Treatment Granted.				Cases referred to own Medical Attendant.	Totals.
	Sanatorium.	Hospital.	Dispensary Treatment.	Dispensary Supervision.		
New Cases ... ..	861	113	54	358	157	1543
Old Cases reconsidered ... ..	581	73	26	955	296	1931
Totals ...	1,442	186	80	1313	453	3,474

## Summary of Dispensary Work, 1934.

Dispensary Area.	Number of Consultations with Practitioners.	Domiciliary visits paid by Dispensary Nurses and Health Visitors to old and new cases.	Visits paid by Consultant and Assistant Tuberculosis Officers to patients at their homes.	Attendances made by old and new patients.
Area No. 1 ... ..	506	4819	628	3498
Area No. 2 ... ..	370	4092	332	2407
Area No. 3 ... ..	2636	9470	697	9293
Area No. 4 ... ..	1918	10526	878	9537
Area No. 5 ... ..	489	7034	1151	8255
Totals ... ..	5919	35941	3686	32990

## Home Visitation by Dispensary Staff.

Year.	Visits by Tuberculosis Officers.	Visits by Dispensary Nurses.	Visits by Health Visitors.
1930	2738	43534	5491
1931	2422	36889	5073
1932	3232	33092	5177
1933	2989	29694	5175
1934	3686	30742	5199

## Tuberculosis Cases in Public Assistance and Other Institutions.

During the year 155 cases in County Institutions and local Infirmaries were seen by the Tuberculosis Officers. The following table shews the action taken under the Tuberculosis Scheme. It will be noted that 88 cases or 56·8% were recommended for institutional treatment.

Dispensary Area.	No. of Cases seen by Tuberculosis Officers.		Action taken under County Council Scheme.			
	Pul.	Non.-Pul.	Institutional Treatment	Dispensary Treatment or Supervision	Referred to Own Medical Attendant	Remarks.
No. 1 (Skipton) ... ..	4	2	5	—	1	
No. 2 (Harrogate) ... ..	23	12	13	4	6	9 Non-Tuberculous. 2 Refused treatment. 1 Died before any action could be taken
No. 3 (Doncaster) ... ..	37	20	27	3	11	15 Non-Tuberculous. 1 Died before any action could be taken.
No. 4 (Barnsley) ... ..	12	16	19	6	2	1 Non-Tuberculous
No. 5 (Sowerby Bridge)	6	23	24	4	1	
TOTAL ... ..	82	73	88	17	21	25 Non-Tuberculous. 2 Refused treatment. 2 Died before any action could be taken.

### X-Ray Examination.

X-Ray plants are now established at the following centres:—Barnsley, Batley, Doncaster, Pontefract, Rotherham and Sowerby Bridge. In the absence of a conveniently situated county plant in the Skipton and Clitheroe areas and the northern part of No. 2 area, cases were sent to the following private clinics for examination:—

Barnoldswick and Clitheroe Dispensaries	} Skipton Hospital Dr. Thomson (Harrogate)
Keighley, Skipton, Settle and Otley Dispensaries	
Harrogate, Ripon, and Tadcaster Dispensaries	

During the year, 3960 X-Ray examinations were made of West Riding patients, 3692 of these being carried out at County X-Ray Centres, as follows:—

Barnsley	...	...	334	Batley	...	...	269
Doncaster	...	...	900	Pontefract	...	...	885
Rotherham	...	...	594	Sowerby Bridge	...	...	710

Dispensary Area.	For Diagnosis				For Treatment*		TOTAL
	Pulmonary		Non-Pulmonary		Pul- monary	Non- Pul- monary	
	Pos.	Neg.	Pos.	Neg.			
Area No. 1 (Skipton) ...	42	148	7	3	15	2	217
Area No. 2 (Harrogate)	27	59	1	6	1	—	94
Area No. 3 (Doncaster)	338	1076	22	44	134	29	1643
Area No. 4 (Barnsley) ...	273	810	42	75	72	24	1296
Area No. 5 (Sowerby Bridge) ...	172	316	23	31	140	28	710
	852	2409	95	159	362	83	3960

\* In connection with artificial pneumothorax treatment.

### Extra Nourishment.

Extra Nourishment, which constitutes a valuable adjunct to the treatment of tuberculosis, has been provided in necessitous cases. 402 patients undergoing dispensary or domiciliary treatment received grants in the form of eggs and milk during the year 1934, at a total cost of £1,567 15s. 10d. The average number of patients in receipt throughout the year was 221.

### Silicosis and Asbestosis (Medical Arrangements) Scheme 1931.

Under the Home Office Order, the Tuberculosis Medical Staff are appointed official examiners under the above scheme. All newly appointed workers in the Sandstone and Asbestos Industries are examined initially by the Tuberculosis Officer, and a report sent to the Medical Board at Sheffield. During the twelve months ended 31st March 1935, 87 such examinations were made by the staff. X-ray pictures were made in nine instances at the request of the Silicosis Medical Board.

### Domiciliary Open-Air Shelters.

The remaining six new shelters ordered in 1933 were delivered and occupied during the year bringing the total up to 101. The shelters fulfil a useful purpose by providing separate sleeping accommodation for tuberculous patients living in overcrowded conditions, enabling them to take full advantage of living in the open-air and reducing the risk of infecting other members of the household. Periodical reports upon the condition of the shelters are furnished by the dispensary staff and tuberculosis health visitors.

### Provision of Clothing.

During the year 545 orders were issued under the Council's scheme for the provision of clothing in respect of applications for assistance in necessitous cases where the applicant was receiving sanatorium treatment as follows:—

Middleton Sanatorium	...	...	306	Crookhill Hall Receiving Home	...	50
Mitchell Memorial Home	...	...	35	Cardigan Sanatorium	...	10
Eldwick Sanatorium	...	...	7	Other Institutions	...	137

### West Riding Distress Fund.

Continued calls have been made upon the above fund to provide assistance in necessitous cases and during the year 42 blankets, 5 bedsteads, 6 mattresses and 6 pillows have been purchased and loaned to patients. Boot repairs have been paid for in respect of 11 children in sanatoria and assistance has been granted towards the cost of removing a family to Papworth Village Settlement. The fund has also been used for the payment of travelling expenses, funeral expenses and the purchase of a special iron patten for a boot. Two pairs of boots were obtained in destitute cases where no other source of supply was available.



### WAR PENSIONERS FOR TUBERCULOSIS.

There was an addition of six new cases of War Pensioners for tuberculosis during the year, the total on the 31st December being 742. This is a decrease of 17 on last year's figures due to deaths, removals, etc.

The following table shews the number of War Pensioners for tuberculosis on various forms of treatment on the 31st December, 1934.

AREA.			Dispensary.				General Dispensary Supervision				Domiciliary.				Institutional (includes San., Hosp., and Training).				TOTALS
			Class T.B. Minus	Class T.B. Plus			Class T.B. Minus	Class T.B. Plus			Class T.B. Minus	Class T.B. Plus			Class T.B. Minus	Class T.B. Plus			
				Group 1	Group 2	Group 3		Non-Pulm.	Group 1	Group 2		Group 3	Non-Pulm.	Group 1		Group 2	Group 3	Non-Pulm.	
No. 1 (Skipton)	...	...	3	—	—	—	38	—	4	1	6	8	—	4	—	—	—	—	64
„ 2 (Harrogate)	...	...	2	—	—	—	29	—	3	2	2	5	1	4	5	1	—	—	55
„ 3 (Doncaster)	...	...	9	—	—	1	94	1	9	2	—	97	1	5	10	4	—	—	239
„ 4 (Barnsley)	...	...	10	—	2	—	1	87	1	6	2	3	130	1	13	2	1	6	266
„ 5 (Sowerby Bridge)	...	...	22	—	—	—	8	42	—	—	3	4	25	—	3	7	1	2	118
Totals	...	...	46	—	2	1	10	290	2	22	10	15	265	3	29	24	7	12	742

### COMBINED TREATMENT AND TRAINING.

The following table shews the admissions and discharges of all classes of patients to courses of combined treatment and training with or without a view to ultimate settlement. At the end of the year the County had 23 Colonists—10 at Preston Hall, Aylesford, Kent—11 at Papworth Hall, near Cambridge and 2 at East Lancashire Tuberculosis Colony, Barrowmore Hall, Gt. Barrow, Chester. In addition 3 cases have been trained at the Derwen Cripples' Training College and have obtained employment.

Colony.	No. under training on 1.1.34	No. admitted during 1934	No. discharged during 1934	No. remaining under training on 31.12.34	
Papworth Village Settlement, near Cambridge ...	1	—	—	1	For Training only.
British Legion Village, Preston Hall, Aylesford, Kent ...	11	2	4	9	Qualifying for Village S't.
East Lancs. Tuberculosis Colony, Gt. Barrow, Chester ...	6	—	2	4	Qualifying for Village S't.
Burrow Hill San. Colony, Frimley, Surrey ...	1	—	—	1	Qualifying for Village S't.
Derwen Cripples' Training College, Oswestry ...	2	1	—	3	For Training only.
	3	—	1	2	For Training only.

Of the 7 cases shewn under the heading "discharged" 3 were transferred to Village Settlement, and 4 cases did not complete courses having been prematurely discharged for various reasons.

### ARTIFICIAL SUNLIGHT TREATMENT.

Dispensary patients in need of artificial sunlight treatment have been sent to the following private and voluntary clinics and during the year 142 patients were referred by the dispensaries for this treatment.

Clayton Hospital, Wakefield.  
Huddersfield Royal Infirmary.  
Leeds General Infirmary.  
Sheffield Royal Infirmary.  
Pontefract General Infirmary

Dr. J. Grieve, Burnley.  
Middleton Sanatorium.  
Manchester and Salford Hospital for Skin diseases (daily clinic).  
Dr. G. W. Wigg, Doncaster.

The following table indicates the work done in respect of different dispensary areas and the results noted at the end of the year.

Dispensary Area.	Type of Case.	No. treated	Total No. of applications	Result of treatment			
				Cured	Much improved	Improved	No change
No. 1 (Skipton) ...	Adenitis (Cervical and Inguinal) ..	14	721	1	3	10	—
	Lupus ... ..	5	398	1	1	2	1
	Other Conditions ... ..	3	131	1	1	1	—
No. 2 (Harrogate) ...	Adenitis (Cervical and Inguinal) ...	1	30	—	—	1	—
	Lupus ... ..	11	1308	1	5	2	3
No. 3 (Doncaster) ...	Adenitis (Cervical and Inguinal) .	12	1286	—	9	1	2
	Lupus ... ..	35	4142	5	15	11	4
	Other Conditions ... ..	6	618	—	3	3	—
No. 4 (Barnsley) ...	Adenitis (Cervical and Inguinal) ...	17	182	—	10	5	2
	Lupus ... ..	25	2174	4	12	6	3
	Other Conditions ... ..	2	98	—	1	—	1
No. 5 (Sowerby Bridge) ...	Adenitis (Cervical and Inguinal) ...	5	88	—	—	5	—
	Lupus ... ..	4	269	2	—	2	—
	Other Conditions ... ..	2	106	2	—	—	—

### Dental Treatment.

Approval was given for the provision of dental treatment in 219 necessitous cases during the year at an estimated cost of £370 9s. 4d. The actual cost was £279 12s. 4d., the reduction being occasioned by patients leaving or being discharged from sanatorium and the non-completion of treatment at the end of the year. Approved Societies and parents contributed £44 10s. 1d. towards the cost of treatment and the balance £235 2s. 3d. was paid by the County Council. Particulars of the treatment approved are shewn below:—

Institution or Dispensary Area.	No. of Cases	Extractions	Fillings	Scalings	Full Upper and Lower Dentures	Upper Denture	Lower Denture	Part Upper Denture	Part Lower Denture	Repairs etc.	Re-makes
Middleton Sanatorium ... ..	55	252	4	—	10	5	—	—	4	5	2
Cardigan Sanatorium ... ..	2	25	—	—	1	—	—	—	—	—	1
Crookhill Hall Receiving Home ...	8	70	—	—	3	2	—	1	1	—	—
County Sanatorium, Wyton ... ..	51	169	58	1	—	—	—	—	—	—	—
Westmorland Sanatorium ... ..	2	9	—	—	—	—	—	—	—	—	—
Berks. and Bucks. Jt. Sanatorium ...	47	152	175	30	—	—	—	1	—	—	—
Papworth Village Settlement ... ..	3	1	1	—	—	—	—	—	—	2	—
Mitchell Memorial Home ... ..	2	3	—	—	1	—	—	—	—	—	1
Preston Hall ... ..	1	3	—	—	—	—	1	—	—	—	—
Barrowmore Hall ... ..	1	2	4	1	—	—	—	—	—	1	—
Dean Head Sanatorium ... ..	2	16	—	—	—	1	—	—	—	—	—
Wensleydale Sanatorium ... ..	1	7	2	—	—	—	—	—	—	—	—
Morton Banks ... ..	1	24	—	—	1	—	—	—	—	—	—
Eldwick Sanatorium ... ..	40	100	20	—	—	—	—	—	—	—	—
No. 3. Doncaster Area ... ..	1	—	—	—	—	—	—	—	—	—	1
No. 4 Barnsley Area ... ..	1	—	—	—	1	—	—	—	—	—	—
N 5 Sowerby Bridge ... ..	1	22	—	—	1	—	—	—	—	—	—
Totals ... ..	219	855	264	32	18	8	1	2	5	8	5

### Surgical Appliances.

The following Surgical Appliances were supplied to patients receiving dispensary or domiciliary treatment during the year, namely:—

Surgical Boots ... ..	13
Spinal Supports ... ..	6
Walking Caliper Splints ... ..	2
Hip Splints ... ..	2
Special Thigh and Hip Splint ... ..	1
Crutches ... ..	2
Iron Patten ... ..	1
Blocked Leather Anklet and Spica ... ..	2
Ankle Spica ... ..	1
Special Cervical Collars ... ..	2
„ Poroplastic Collar ... ..	1
„ Wrist Splint ... ..	1
Thoracoplasty Belt ... ..	1
Alterations, Repairs and Renewal Parts ... ..	21

The total cost of these appliances was £108 0s. 6d. of which a sum of £1 9s. 6d. was subscribed by or on behalf of two patients.

In addition to those enumerated some 21 surgical appliances of various types representing a total cost to the County Council of £56 3s. 3d. were supplied during the period of the report to patients actually undergoing residential institutional treatment for surgical tuberculosis.

Contributions towards the cost of surgical appliances are required where patients are not receiving institutional treatment and the circumstances of the family, as determined by the approved scale of income, permit of this. In the case of patients undergoing Hospital or other residential treatment for surgical tuberculosis appliances are prescribed by and fitted under the supervision of the Medical Superintendent, and the full cost is borne by the County Council without any question of contribution.

TABLE SHOWING ENVIRONMENTAL AND SOCIAL CONDITION OF PATIENTS, DECEMBER, 1934.

	Infectious Pulmonary		Non-Infectious Pulmonary		Non-Pulmonary	
	Under 15	15 and Over	Under 15	15 and Over	Under 15	15 and Over
No. of Cases from houses regarded as "overcrowded"*	3	44	94	186	155	30
No. of cases from houses where more than one family reside	—	62	62	286	115	50
No. of Cases where patient sleeps in separate room ... ..	14	694	367	1,113	461	336
No. of cases where patient sleeps in separate bed but not separate room ... ..	11	284	435	634	597	176
No. of cases where patient sleeps "two in a bed" ... ..	15	366	428	2,341	732	401
No. of cases where patient sleeps "more than two in a bed" ...	—	10	86	186	136	21
No. of Cases where patient receives out-relief from Public Assistance Committee ...	3	216	129	712	192	53

\*For the purpose of this table an "overcrowded" house is one where the number of adults per room is more than two, excluding scullery without fireplace, bathroom and cellars.

#### INSTITUTIONAL ACCOMMODATION.

The institutional accommodation available for pulmonary and non-pulmonary cases from the West Riding area on the 31st December, 1934 was 902 beds. The average user during the year amounted to 904 beds. The respective figures for 1933 were 871 and 877.

The extra beds taken in 1934 were mostly for non-pulmonary cases in adults and children at the Shropshire Orthopædic Hospital (8), Leasowe Hospital (5), and Marguerite Home (4). Additional accommodation for pulmonary children was found to be necessary during a part of the year to cope with a sudden accession of recommendations, and 10 extra beds were taken at the Berks. and Bucks. Sanatorium for a few months.

Early cases of pulmonary tuberculosis were admitted for treatment to the following institutions:

*Adults*:—Middleton, Cardigan, Meathop and Oakwood Hall.

*Children*:—Wyton, Berks. and Bucks. and Wensleydale.

Advanced cases to Crookhill Hall, Morton Banks and Dean Head Institutions.

Cases for observation were sent to Middleton, Oakwood Hall and Berks. and Bucks. Institutions. The number of such cases admitted during 1934 was 67, as compared with 79 in the previous year. The following is a comparison of the negative and open cases treated since 1925:—

Years	Sputum Negative	Sputum Positive	Proportion of Positive Cases
1925 to 1930	7,550	2,014	21.0%
1931	932	481	34.0%
1932	755	482	39.0%
1933	607	536	46.9%
1934	576	462	44.5%

With regard to orthopædic treatment, the total institutional accommodation at the end of 1934 was 183 beds, 19 for men, 25 for women, and 139 for children.

The accommodation for pulmonary and glandular children at the end of the year was 149



## Institutional Accommodation Available for West Riding Cases—December, 1934.

	No. of Beds available					
	For Pulmonary Cases			For Non-Pulmonary Cases		
	Men	Women	Children	Men	Women	Children
<b>Controlled by County Council (Public Health Committee).</b>						
Middleton-in-Wharfedale Sanatorium ... ..	300	—	—	—	—	—
Cardigan Sanatorium, near Wakefield ... ..	—	50	—	—	—	—
Eldwick Sanatorium, near Bingley ... ..	—	—	39	—	—	—
Mitchell Memorial Home, Rawdon ... ..	30	—	—	—	—	—
Crookhill Hall Receiving Home ... ..	40	—	—	—	—	—
<b>Not Controlled by the County Council:—</b>						
Morton Banks Sanatorium, near Keighley ... ..	—	53	—	—	—	—
Dean Head Sanatorium, Horsforth ... ..	—	60	—	—	—	—
Oakwood Hall Sanatorium, Rotherham ... ..	—	15	15	—	—	—
Wyton Hostel, Huntingdon ... ..	—	—	48	—	—	—
Wensleydale Sanatorium, Aysgarth ... ..	—	—	12	—	—	—
Westmorland Sanatorium, Meathop ... ..	—	6	—	—	—	—
Marguerite Home, Thorparch ... ..	—	—	—	—	—	30
Leasowe Hospital, Cheshire ... ..	—	—	—	—	7	14
King Edward VII Hospital, Rivelin Valley ... ..	—	—	—	—	—	37
Shropshire Orthopædic Hospital, Oswestry ... ..	—	—	—	12	17	—
Sheffield Children's Hospital ... ..	—	—	—	—	—	6
Berks. and Bucks. Joint Sanatorium, Oxon. ... ..	—	—	34	—	—	—
Yorkshire Children's Orthopædic Hospital, Kirkby- moorside ... ..	—	—	—	—	—	11
Stannington Sanatorium, Northumberland ... ..	—	—	—	—	—	14
Royal National Orthopædic Hospital, Stanmore, Middlesex ... ..	—	—	—	—	—	16
Miscellaneous Institutions ... ..	16	—	1	7	1	11
Totals ... ..	386	184	149	19	25	139

## Institutional Treatment during 1934.

Institution	Patients in residence on 1.1.34	Admissions 1934			Total number of Admissions	Discharges 1934			Total number of Discharges	Patients in residence on 31.12.34	
		Men	Women	Children		Men	Women	Children			
Pulmonary Institutions.											
Middleton-in-Wharfedale Sanatorium	287	469	—	—	469	477	—	—	477	279	
Cardigan Sanatorium	49	—	124	—	124	—	124	—	124	49	
Mitchell Memorial Home	30	80	—	—	80	84	—	—	84	26	
Eldwick Sanatorium	39	—	—	83	83	—	—	83	83	39	
Crookhill Hall Receiving Home	39	74	—	—	74	80	—	—	80	33	
Dean Head Sanatorium	60	—	150	—	150	—	151	—	151	59	
Morton Banks Sanatorium	52	—	89	7	96	—	90	10	100	48	
Wyton Sanatorium	50	—	—	83	83	—	—	85	85	48	
Westmorland Sanatorium	7	—	10	—	10	—	11	—	11	6	
Oakwood Hall Sanatorium	30	1	29	36	66	2	31	33	66	30	
Stannington Sanatorium	12	—	—	15	15	—	—	13	13	14	
Highwood Hospital	1	—	—	—	—	—	—	—	—	1	
Wensleydale Sanatorium	11	1	2	7	10	4	2	3	9	12	
Berks. and Bucks. Sanatorium	24	—	1	39	40	—	1	29	30	34	
Miscellaneous	1	13	5	—	18	13	5	—	18	1	
Non-Pulmonary Institutions.											
Yorkshire Children's Orthopædic Hospital											
Kirkbymoorside	10	—	—	7	7	—	—	6	6	11	
Marguerite Home, Thorparch	26	—	—	21	21	—	—	17	17	30	
King Edward VII. Hospital, Sheffield	36	—	—	31	31	—	—	30	30	37	
Shropshire Orthopædic Hospital	21	31	38	1	70	34	26	2	62	29	
Royal National Orthopædic Hospital, Stanmore	17	—	1	9	10	—	1	10	11	16	
Miscellaneous Institutions	27	11	11	41	63	12	9	29	50	40	
Total	829	680	460	380	1520	706	451	350	1507	842	

**Immediate Results of Treatment of Patients Discharged from Residential Institutions during the year 1934.**

**(a) Pulmonary Cases.**

Classification on admission*	Condition at time of discharge.	Duration of Treatment in the Institution.												Total
		Under 3 months			3—6 months			6—12 months			More than 12 months			
		M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	
Class T.B. Minus.	Quiescent ...	47	31	7	90	51	36	38	12	47	10	4	27	400
	Not Quiescent ...	29	13	8	38	6	6	24	9	7	5	1	2	148
	Died in Institution	10	2	—	3	4	1	1	2	—	4	1	—	28
Class T.B. + Group I.	Quiescent ...	1	2	—	12	8	—	2	6	—	—	—	—	31
	Not Quiescent ...	2	8	—	7	14	—	—	6	—	—	2	—	39
	Died in Institution	—	2	—	—	2	—	—	—	—	1	—	—	5
Class T.B. + Group II.	Quiescent ...	3	5	—	11	17	—	18	15	—	3	—	—	72
	Not Quiescent ...	18	17	—	26	11	—	20	10	—	16	7	—	125
	Died in Institution	5	5	—	3	1	—	2	2	—	4	1	—	23
Class T.B. + Group III.	Quiescent ...	—	2	—	7	3	—	2	4	—	2	—	—	26
	Not Quiescent ...	4	10	—	17	11	—	23	11	1	13	3	—	93
	Died in Institution	14	12	—	12	2	—	4	1	—	9	—	—	54
	Totals ...	133	109	15	226	130	43	134	78	55	67	19	29	1038

\* Classification according to Memo. 37/T.

**(b) Non-Pulmonary Cases.**

Classification on Admission.	Condition at time of discharge	Duration of Treatment in the Institution.												Total
		Under 3 months			3—6 months			6—12 months			More than 12 months			
		M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	
Bones and Joints.	Quiescent ...	6	5	4	2	2	8	6	2	10	7	5	27	84
	Not Quiescent ...	4	1	1	—	—	—	3	2	1	—	—	1	13
	Died in Institution	1	—	1	1	—	3	1	—	—	1	—	1	9
Abdominal	Quiescent ...	—	2	2	2	3	12	—	1	16	1	—	10	49
	Not Quiescent ...	2	1	3	1	3	4	—	1	4	1	—	—	20
	Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
Other organs.	Quiescent ...	3	—	—	1	1	4	—	—	2	—	—	1	12
	Not Quiescent ...	1	—	2	1	—	—	—	—	—	—	—	1	5
	Died in Institution	—	1	—	—	—	—	1	—	—	—	—	—	2
Peripheral Glands.	Quiescent ...	2	—	4	2	1	10	—	—	13	—	—	8	40
	Not Quiescent ...	—	1	4	—	1	3	—	—	—	—	—	2	11
	Died in Institution	—	—	—	—	—	1	—	—	—	—	—	—	1
Totals ...		19	11	21	10	11	45	11	6	46	10	5	51	246

## SANATORIUM TREATMENT.

Whereas previously sanatorium treatment was regarded almost entirely from the point of view of medical science, it has now become more necessary for the physician to join forces with the surgeon specialist. Our ideas of the sanatorium have altered somewhat. The first conception pictured it as a place of rest and quietude. It has now become an active rather than a passive institution like any up-to-date hospital with its operating theatre, X-Ray room and laboratory.

Artificial pneumothorax, together with other surgical measures, such as phrenic evulsion, thoracoplasty, etc., have been revolutionising the treatment of chronic pulmonary tuberculosis. Where formerly in many instances treatment could only follow the ordinary sanatorium routine methods, *i.e.*, rest and graduated exercise, with indifferent results, it is now active treatment and frequently successful.

At one pulmonary hospital investigations were made into a number of suspected cases of pulmonary tuberculosis of bovine origin. The cases investigated were farm labourers or persons who had been dealing with cattle over a period of years. In three cases it was possible to cultivate from the sputum the bovine bacillus. Two of these had a rather bad form of the disease and died within two years of the onset. In one case a post mortem was performed which was the subject of a special report on bovine tuberculosis.

The opinion was expressed that there were instances where the route of infection was respiratory, and that the disease was not contracted by the ingestion of tuberculous milk. It was held that to those in daily contact with dairy cattle the risk of atmospheric pollution is a real one. The byres become infected from the dried excreta. Added risks are to be found in the grooming and handling of infected cows.

Pulmonary tuberculosis of bovine origin is much more prevalent than is suspected. Quite a number of patients have been admitted to sanatorium where it was thought that the condition was due to bovine infection, but it has not been possible to make a complete bacteriological examination in each case. It seems that many escape tuberculous infection of the glands, bones and joints in childhood, only to incur the risk of pulmonary disease in later life.

### Sanatorium Treatment.—Immediate Results.

Of the total sanatorium discharges in adults suffering from pulmonary conditions, 435 or 48.6% belonged to group T.B. minus, and 461 or 51.4% to the later stages with T.B. in the sputum.

With regard to the results of treatment, of those discharged quiescent or improved, 283 or 69.7% were early cases with negative sputum, and 123 or 30.3% in the later stages of the disease, whose sputum contained tubercle bacilli.

Of those dying in the institutions, 75.2% occurred amongst cases with positive sputum.

Of the pulmonary adult discharges, 598 or 66.7% took place under six months as compared with 298 or 33.3% of six months or over. The greater proportion of discharges under six months took place in those in the earliest stages of the disease, and represent 324 or 74.5% in group T.B. minus as compared with 274 or 59.4% of those in T.B. plus (all groups).

**Children.**—Of the total number of discharges in the pulmonary classes, only one child had sputum positive to T.B. Of the result of treatment in the 141 children in the T.B. minus group, 117 or 83% were discharged with quiescent disease, and 23 or 16·3% not quiescent. One child died in the institution (T.B. Minus with glands).

**Non-Pulmonary Discharges.** Of the total discharges under this head, 83 were adults and 163 were children. 80.4% of the children were discharged with the disease quiescent, as compared with 65.1% in the case of adults.

**Visits to Sanatoria.** During 1934 the following institutions where West Riding patients were under treatment for tuberculosis, were visited by members of the Tuberculosis Sub-Committee:—

Royal National Orthopædic Hospital, Stanmore	April
do. do. do.	October
The Robt. Jones and Agnes Hunt Orthopædic Hospital, Oswestry	August
The Liverpool Open-air Hospital, Leasowe	August

## CARDIGAN SANATORIUM.

The Medical Superintendent reports:—

During the year, 121 adult female patients and 3 female children were admitted to Cardigan Sanatorium and were classified as follows:—

### Pulmonary Cases:—

Class T.B. Minus	...	...	...	...	...	...	...	73
Class T.B. Plus Group	I	...	...	...	...	...	...	18
" " " "	II	...	...	...	...	...	...	16
" " " "	III	...	...	...	...	...	...	11
For Observation	/ ...	...	...	...	...	...	...	4
Non-Pulmonary Cases	...	...	...	...	...	...	...	2



The number of cases with tubercle bacilli in their sputum, on admission or found by examination whilst in the Sanatorium, was 53, or 43% of all admissions, as against 64, or 40·5% during 1933.

There were no deaths in the sanatorium during the year.

**Observation Cases.**—During the year 4 cases were admitted for observation. 3 were accepted as suffering from pulmonary tuberculosis and 1 was not accepted.

**Operative Treatment.**—During the year the services of the Surgeon Specialist were again available and the following three patients were examined by him:—

*Mrs. D.—Pul. T.B. Minus.* A case of streptococcal empyema. Transferred to Leeds General Infirmary. Successfully operated upon and returned home well.

*Mrs. B.—Pul. T.B. Minus.* A case of staphylococcal empyema. Transferred to Leeds General Infirmary and thence home after successful operation.

*B.B.—Pul. T.B. Plus Group II.* Suspected early tuberculous peritonitis. Operative treatment not advised.

#### Artificial Pneumothorax Treatment.

**Inductions.**—During the year 16 patients were selected as being suitable for this treatment, and in 15 primary induction of artificial pneumothorax was successfully performed. Nine patients were still having this treatment continued at the end of the year or at the date of their discharge. Treatment was abandoned in three cases owing to unsatisfactory collapse, in two cases owing to progression of disease in the contra-lateral lung, and in one case owing to obliterative pleurisy.

**Refills.** In addition to the new cases and those patients who had artificial pneumothorax inductions in other years, refills were given to seven men and women who attended as out-patients. Approximately 230 refills were given at the Sanatorium during the year.

#### Injection of Gold Salts.

The preparations used during the year were Sanocrysin, intravenously, and Solganal "B" Oleosum and Myocrysin, intramuscularly.

Sanocrysin was used in 20 cases. Seven had a full course of 5 to 6 grms, six were much improved and one was improved. Four were still under treatment at the end of the year. In nine cases injections were stopped for the following reasons:—gastro-intestinal symptoms 5, general intolerance 3, ulceration of mouth 1.

Solganal "B" Oleosum was given in 20 cases. Twelve had a full course and nine were much improved, while the remaining three were improved. Two cases were still under treatment at the end of the year. In six cases injections had to be stopped owing to gastro-intestinal disturbance.

One patient had a full course of Myocrysin. The injections were very well tolerated and the result was good.

#### Occupational Therapy.

Four hours' instruction has been given every week during the winter months by Mrs. Crowe, the Instructress, in leather work, needlework and raffia work.

#### Radiography.

96 patients were X-Rayed by the County Radiographer during the year, either at Batley or Pontefract Dispensary.

#### Dental Treatment.

Dental treatment was again available for those patients requiring it, and 5 patients benefited under the scheme. Two patients had artificial dentures provided.

#### Provision of Clothing.

Nine grants were made under the scheme for the provision of clothing to patients under treatment.

#### Immediate Results of Treatment.

The following table shows the immediate results of treatment of patients discharged with tuberculosis in 1934:—

Classification on Admission	Condition at time of discharge.	Period of Residence				Total
		Under 3 months	3/6 months	6/12 months	Over 12 months	
Pulmonary Class T.B. Minus	Quiescent ... ..	19	30	9	—	58
	Not quiescent ... ..	4	6	2	—	12
	Died ... ..	—	—	—	—	—
Class T.B. plus Group I.	Quiescent ... ..	1	5	4	—	10
	Not quiescent ... ..	1	3	3	—	7
	Died ... ..	—	—	—	—	—
Class T.B. plus Group II.	Quiescent ... ..	1	4	4	—	9
	Not quiescent ... ..	3	1	2	—	6
	Died ... ..	—	—	—	—	—
Class T.B. plus Group III.	Quiescent ... ..	1	3	2	—	6
	Not quiescent ... ..	2	1	1	—	4
	Died ... ..	—	—	—	—	—
Non-Pulmonary Peripheral glands	Quiescent ... ..	—	1	—	—	1
	Not quiescent ... ..	1	—	—	—	1
	Died ... ..	—	—	—	—	—

In 8 cases the period of residence was less than 28 days. The results of treatment in these are omitted from the above table.

## MIDDLETON SANATORIUM.

Dr. C. J. Martin, Acting Medical Superintendent, reports:—

"I have to refer to the very great loss the Sanatorium sustained in September last, by the death of Dr. Thompson Campbell, who had been the Medical Superintendent for fifteen years. An indefatigable worker, he gained the affection of all the patients, who recognised that he had their interests always at heart. A commemoration plaque to his memory, subscribed for by patients and staff, is being placed in the sanatorium chapel.

The number of cases admitted during the year was 469, classified as follows:—

Pulmonary Class T.B. Negative	...	...	...	...	...	283
Class T.B. Positive						
Group I	..	...	...	...	...	24
Group II	...	...	...	...	...	72
Group III	...	...	...	...	...	36
Non-Pulmonary	...	...	...	...	...	33
Observation	...	...	...	...	...	21

Of these the number of advanced cases was still high.

During the year the proportion of bed cases, that is those who had at least two meals in bed daily, was 56.29%.

Artificial Pneumothorax was induced on 34 cases. Of these 7 left the sanatorium "Quiescent." The majority of the others were discharged to continue the treatment at the dispensaries.

Artificial Pneumothorax in conjunction with Gold Therapy was tried with two cases. The result was not satisfactory, both patients leaving the sanatorium "Not Quiescent."

Gold Therapy (Sanocrysin) was tried in 13 cases. In only 5 however was a negative sputum result reported.

Two cases were sent to Leeds Infirmary for thoracoplasty. One of these was an advanced empyema. Both of these cases died.

Phrenic evulsion was tried in two cases, both leaving the sanatorium "Not Quiescent."

## MIDDLETON SANATORIUM.

Table showing immediate results of treatment of patients discharged during 1934.

Classification on admission to the Institution	Condition at time of Discharge	Duration of Residential Treatment				
		Under 3 months	3 to 6 months	6 to 12 months	Over 12 months	Totals
Class T.B. Minus	Quiescent ...	30	59	30	10	129
	Not Quiescent ..	26	34	21	3	84
	Died ...	10	3	1	4	18
Class T.B. + Group I.	Quiescent ...	—	3	—	—	3
	Not Quiescent ...	2	3	—	—	5
	Died ...	—	—	—	—	—
Class T.B. + Group II.	Quiescent ...	1	6	13	3	23
	Not Quiescent ..	10	22	15	15	62
	Died ...	3	2	2	4	11
Class T.B. + Group III.	Quiescent ...	—	4	—	1	5
	Not Quiescent ...	3	12	16	5	36
	Died ...	10	7	1	8	26
Bones and Joints	Quiescent ...	—	2	1	—	3
	Not Quiescent ...	1	—	3	—	4
	Died ...	—	—	—	1	1
Abdomen	Quiescent ...	—	2	—	1	3
	Not Quiescent ...	2	1	—	1	4
	Died ...	—	—	—	—	—
Other Organs	Quiescent ...	—	1	—	—	1
	Not Quiescent ...	—	1	—	—	1
	Died ...	—	—	1	—	1
Peripheral Glands	Quiescent ...	1	2	—	—	3
	Not Quiescent ...	—	—	—	—	—
	Died ...	—	—	—	—	—

The results of treatment of 32 cases whose residence did not exceed 28 days, are not included in the above table.

### Resumé of the work of the Ultra-Violet Light Department for the Year, 1934.

A total of 94 patients received treatment by U.V. Light as follows:—

General irradiation	...	...	...	...	41	} Total 94 patients
Local irradiation	...	...	...	...	49	
Both local and general	...	...	...	...	4	
Number of patients who completed treatment	...	...	...	...	48	
Number of patients who left prematurely	...	...	...	...	12	
Number of patients who continue treatment	...	...	...	...	34	

#### Patients with pulmonary involvement.

Sputum positive for T.B.	...	...	...	...	...	24
Sputum negative for T.B.	...	...	...	...	...	29

Patients with no pulmonary involvement. ... .. 41

#### RESULTS OF TREATMENT.

	Total	T.B. +	T.B. -	Non-pulmonary
Cured or much improved	42	9	14	19
Some improvement	27	3	11	13
In statu quo	19	7	2	10
Worse or dead	6	3	1	2

Number treated for tuberculous lesions ... .. 70

Number treated for non-tuberculous lesions ... .. 24

#### Tuberculous lesions treated:—

Abdominal (mesentric glands, peritonitis, enteritis, etc.)	...	...	...	28
Bones and Joints	...	...	...	18
Skin and mucous membranes	...	...	...	5
Adenitis	...	...	...	13

#### Occupational Therapeutics.

**Attendance:—**The number of patients who have attended for instruction during the year is 274.

**Work:—**The work done by the patients covers raffia work, rug work, cane work, fancy leather work, wool hand spinning, rabbitry, cobbling, pewter work and carpentry: of these occupations fancy leather work proves to be most popular. As results are not too difficult to obtain, the manual effort involved is not too great and the cost not too heavy. Next to this the cobbling section proves to be popular, due to the fact that the patients feel that here they have a useful occupation and which will be of value to them in their home life. The lighter work of raffia, wool rugs and pewter work is undertaken by those patients whose physical strength does not permit any great manual effort. The carpentry section has been used by the patients who were able to undertake the heavier work involved, and during the short time which patients have in this section, the results are very creditable. This section, although not so popular as the lighter crafts, is allowed for by the enthusiasm displayed in the making of various objects.

During the year the fancy leather department has been responsible for the making of 424 purses, 45 pochettes, 48 handbags, 36 cigarette cases, 14 note cases, 21 book markers, 14 tobacco pouches, 42 pocket wallets, handkerchief cases, pyjama cases, book covers, key cases, serviette rings, lamp stand centre and other articles. The rug, raffia and pewter section has been responsible for rugs, raffia pochettes, etc., pewter ash trays and photo frames. The cobbling section has been responsible for the repairs of 537 pairs of boots and shoes, 322 pairs of these being done for necessitous cases. The carpentry class have been employed on work including the cleaning and varnishing of sanatorium furniture, making cabinets, trays, step ladders, cupboards, fireside curbs, children's play pens, table and bath stools.

The work done has been of good standard and with reference to leather work it is interesting to note that materials have been supplied to patients at their homes, after taking their discharge from the sanatorium.

#### Clothing.

Clothing was provided for 341 necessitous cases and was made up as follows:—

Suits of clothes issued	...	...	...	...	71
Suits of underclothes	...	...	...	...	235
Pairs of boots	...	...	...	...	96

Clothing was issued from stock to 39 patients and comprised the following:—

Number of suits	...	...	...	...	14
Number of underclothes	...	...	...	...	29
Number of pairs of boots	...	...	...	...	3

Clothing was withdrawn from three patients: the remainder was retained.



## CROOKHILL HALL RECEIVING HOME.

Dr. V. Ryan, Medical Superintendent, reports:—

During the year, 74 patients were admitted for treatment, classified as follows:—

Class T.B. minus	...	...	...	...	...	...	17
Class T.B. plus—Group I	...	...	...	...	...	...	2
"    "    "    "    II	...	...	...	...	...	...	19
"    "    "    "    III	...	...	...	...	...	...	35
Non-Pulmonary	...	...	...	...	...	...	1

In ten cases, the period of residence was less than 28 days, and the results of treatment in these are ignored in the table of immediate results given below:—

Following the practice of recent years, certain patients in an early stage, or affected with a mild localised form of pulmonary tuberculosis, were admitted, but about 70% of the total were cases of old standing disease. Many of these had had one or more periods of sanatorium treatment previously, and were mainly men of middle age whose disease had existed for as long as 7 to 10 years. In contrast to these, there was a small number of younger men with relatively acute disease. 15 deaths occurred in the Home, but this number does not accurately reflect the mortality, as parents and relatives indulge in a natural desire to take the hopeless case home before the end approached.

Scope for special treatment was consequently limited. Eight T.B. positive cases were selected for collapse therapy. Artificial Pneumothorax was tried in seven cases, and established in four. The three patients in whom this form of treatment proved impossible owing to pleural adhesions, had phrenic evulsions performed by the surgeon specialist, Mr. Moir. One chronic advanced case had a full thoracoplasty done in two stages by Mr. Moir, early in the year, and shows an excellent result.

Two of the phrenic evulsion cases subsequently developed complications—one genito-urinary tuberculosis, and the other a tuberculous knee-joint, both with bad results. Otherwise, the immediate results in the case of the other patients are encouraging so far.

Gold therapy was employed in seven cases. Both the intravenous and intramuscular products were used. Three of the patients so treated, had collapse therapy as well. In fact, it was only after a preliminary course of Gold that they became eligible for consideration for Pneumothorax. Two of these had bilateral disease, and Gold treatment was accompanied by sufficient improvement in the less affected lung, as shown by serial X-Ray pictures, to bring the cases under the category of "mainly unilateral" disease. The third case developed genito-urinary tuberculosis, and was a failure, as reported above. The remaining four patients (unsuitable for collapse therapy) were all T.B. positive. Of these, one suffered from asthma; a full course of Crisalbine was given, producing dermatitis and stomatitis. His asthma showed no improvement, and the treatment was a failure. In the remaining three cases, there was some degree of improvement, as shown by serial X-Ray films, and improvement in general health, but in one only by disappearance of tubercle bacilli from the sputum. There were no untoward reactions. Although the number here treated is too small to draw specific conclusions, the results obtained, taken in conjunction with those of patients treated elsewhere during the year, confirm one's previous experiences that Gold has a definite value in tuberculosis. Excepting a case of tuberculous pyothorax treated successfully by closed aspiration, and the administration of autogenous vaccines, with indefinite results, there was no further scope for special treatment.

The ordinary sanatorium regime was applied to all patients. In a hospital for advanced cases, complications such as tuberculous laryngitis and enteritis are common. To relieve these painful conditions is difficult, and the brunt of the work falls on the Matron and nursing staff, and it is appropriate to express appreciation of their work and that of my medical colleagues.

## Sanatorium Discharges 1934.

Classification on Admission	Condition at time of discharge	Period of Residence				Total.
		Under 3 months	3-6 months	6-12 months	Over 12 months	
Class T.B. minus	Quiescent	2	6	1	—	9
	Not quiescent	3	1	—	2	6
	Died	—	—	1	—	1
Class T.B. plus Group I.	Quiescent	—	2	1	—	3
	Not quiescent	—	2	—	—	2
	Died	—	—	—	1	1
Class T.B. plus Group II.	Quiescent	1	2	3	—	6
	Not quiescent	3	2	3	1	9
	Died	1	—	—	—	1
Class T.B. plus. Group III.	Quiescent	—	3	2	—	5
	Not quiescent	1	3	6	5	15
	Died	4	5	1	1	11
Non-pulmonary } Other Organs }	Quiescent	—	—	—	—	—
	Not quiescent	1	—	—	—	1
	Died	—	—	—	—	—
/ Total		16	26	18	10	70

ELDWICK SANATORIUM.

Dr. Margaret Sharp, Medical Superintendent, reports :—

The number of children admitted during the year was 83, classified as follows on admission :

Pulmonary.	Negative	...	...	...	...	...	...	52
Non-Pulmonary.	Bones and Joints	...	...	...	...	...	...	2
	Abdomen	...	...	...	...	...	...	12
	Peripheral glands	...	...	...	...	...	...	16
Observation	...	...	...	...	...	...	...	1

Some of the milder cases benefit so quickly from the improved conditions as to show no further symptoms after admission. Such conditions, *e.g.*, swollen cervical glands, cough, diarrhoea or abdominal pain, are reported in the history, but do not recur at all, or perhaps only in the first few days. In a number of cases with persistent catarrhal sounds in the chest, the course of the case suggests that these are due to some other form of infection, even though a tuberculous lesion may be present as well. Two girls, sent in on excellent evidence as pulmonary cases, showed chiefly abdominal symptoms here.

The Mantoux test was performed on 48 of the cases. Of these, 39, or over 80% gave positive reactions—nine to 1 in 10,000 dilution: 26 to 1 in 1,000 and four only to 1 in 100. A dilution of 1 in 10 was tried on some of the negative cases, but none of them gave a definite positive reaction, and the use of this strong solution has now been abandoned.

The one observation case was sent in for the diagnosis of attacks of dyspnoea and had to be kept seven weeks before one occurred. It was then found not to be due to asthma or any chest condition but to a species of croup, possibly due to acidosis.

With regard to X-Ray examinations, the practice has been adopted of sending children requiring such examination to the Sowerby Bridge tuberculosis dispensary by taxi, and this has worked very satisfactorily. Of the 83 children admitted, 50 had had skiagrams taken before admission. Fourteen of these had a record taken for comparison: two of these showed an increase in positive signs and one a decrease. Three of the fourteen had a third skiagram taken showing a decrease in signs in two cases and stationary in one.

Three non-pulmonary cases were X-Rayed for the first time after admission in order to ascertain the state of the lungs: these were all negative.

**Treatment with Ultra-Violet Light.** Thirty-four children had courses of treatment with either mercury vapour or carbon-arc lamps. In 22 of these the final result was satisfactory, but there was nothing to indicate that it was specially due to this treatment. Six showed improvement definitely due to the light treatment: of these, 3 were abdominal cases, 2 cervical glands who had local treatment as well as general: and one “pre-tubercular,” suspected of a heart affection, showed marked benefit after a few treatments. One of the abdominal cases, who eventually did particularly well with the carbon arc, was tried first with the mercury vapour lamp and had to be stopped for vomiting. One early pulmonary case had the carbon-arc treatment stopped for loss of weight. These two were the only ones who experienced any ill effects.

Tonsils and adenoids were removed for 16 children. Seven of these showed marked improvement after the operation: three in the disappearance of cervical glands which had previously been obstinate; four in their general condition including in one case the clearing up of chest signs.

Immediate Results of Treatment.

The following table shows the immediate results of treatment of the patients discharged.

Classification on admission to the Institution.	Condition at time of discharge.	Duration of Residential Treatment.				Total
		Under 3 months	3-6 months	6-12 months	Over 12 months	
Pulmonary Class T.B. Minus	Quiescent ... ..	7	22	11	1	41
	Not Quiescent ... ..	6	5	4	—	15
	Died ... ..	—	—	—	—	—
Abdomen	Quiescent ... ..	2	5	2	—	9
	Not Quiescent ... ..	—	2	2	—	4
	Died ... ..	—	—	—	—	—
Peripheral Glands	Quiescent ... ..	2	4	3	—	9
	Not Quiescent ... ..	1	1	—	1	3
	Died ... ..	—	—	—	—	—
Totals ...		18	39	22	2	81

## MITCHELL MEMORIAL HOME.

Dr. Sproat reports:—

During the year 80 cases were admitted for treatment as follows:—

T.B. minus	...	...	...	...	...	...	...	58
T.B. plus Group I	...	...	...	...	...	...	...	1
„ „ II	...	...	...	...	...	...	...	18
„ „ III	...	...	...	...	...	...	...	3

The following table shows the condition of the patients on discharge:—

Classifi- cation on admission	Condition at time of discharge	Duration of Treatment in Institution				Total
		Under 3 months	3—6 months	6—12 months	More than 12 months	
Class T.B. minus	Quiescent	14	30	7	—	51
	Not Quiescent	—	3	2	1	6
	Died	—	—	—	—	—
Class T.B. plus Group I.	Quiescent	1	3	1	—	5
	Not Quiescent	—	2	—	—	2
	Died	—	—	—	—	—
Class T.B. plus Group II.	Quiescent	1	2	—	—	3
	Not Quiescent	2	2	2	—	6
	Died	1	1	—	—	2
Class T.B. plus Group III.	Quiescent	—	—	—	—	—
	Not Quiescent	—	2	1	—	3
	Died	—	—	1	—	1
Totals		19	45	14	1	79

During the year, the Mitchell Memorial Home has been used for cases not requiring artificial pneumothorax treatment. Treatment consisted for the most part of rest and graduated exercise. Such cases as were found suitable for artificial pneumothorax treatment were transferred to Middleton and Crookhill Hall institutions. During the year the results of treatment were satisfactory: the majority were benefited to a greater or lesser degree as shewn by gain in weight and capacity for exercise and work.

In 5 cases the period of residence was less than 28 days, and the results of treatment of these are not included in the above table.



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COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE.

TWENTY-SEVENTH  
ANNUAL REPORT

OF THE

School Medical Officer,

ON THE

Medical Inspection and Treatment of  
School Children,

For the Year ended 31st December, 1934.

*(Presented to the Child  
Welfare Sub-Committee  
May 8th - 1935)*





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Routine Inspections at Schools	...	...	...	...	...	...	61911
Special Inspections at Schools	...	...	...	...	...	...	1588
Attendances for Treatment at Clinics	...	...	...	...	...	...	32464

### D.—School Nurses and Health Visitors.

Visits to Schools	...	...	...	...	...	...	...	...	...	8294
Examinations (including Cleanliness Inspections in Schools)	...	...	...	...	...	...	...	...	...	455297
Visits to Homes	...	...	...	...	...	...	...	...	...	33751

### E.—School Clinics.

Number of Minor Ailments Treated	...	...	...	...	...	...	47943
Total Number of Attendances	...	...	...	...	...	...	105122



## WEST RIDING EDUCATION COMMITTEE.

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The Chairman of the County Council.

The Vice-Chairman of the County Council.

The Chairman of the Finance Committee.

### ALDERMEN.

Armistead, J. H.  
Brigg, J. J., M.A., LL.M.  
Dewhirst, I. J.  
Dunn, E.  
Foulstone, T. H.

Grylls, R. M.  
Jackson, Sir Percy, LL.D.  
(Chairman)  
Lane, J. W.  
Schofield, G.

Smith, Lady Mabel  
Tomlinson, T.  
Turner, W. H.  
Unwin, Miss Hermione

### COUNCILLORS.

Allan, J. T.  
Archer, Rev. F.  
Bagnall, Capt. W. G.  
Bevan, S. G.  
Bowker, S.  
Brooks, T. J., M.B.E.  
Clough, W.  
Crossley, Major J. H.

Dyson, W. E.  
Eddy, H.  
Everatt, W. T.  
Flavell, A.  
Hirst, F.  
Hyman, W. M. (Vice-Chairman)  
Jones, Mrs. L.  
Jones, W. E.

Page, A. J.  
Paling, W. T.  
Shaw, Rev. G. M.  
Spence, T. F.  
Taylor, E.  
Wragg, Mrs. E.

### ADDED MEMBERS.

Baillie, Sir James  
Glazier-Foster, F.  
Hazelip, Mrs. E.

Hinchliffe, Miss Mabel  
Morris, Miss G.  
Pickard-Cambridge, Dr. A. W.  
Singleton, Mrs. M.  
Smithies, Mrs. C. A.  
Spivey, T. W.

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## CHILD WELFARE SUB-COMMITTEE.

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### Representatives of West Riding Education Committee.

County Aldermen J.W. Lane, G. Schofield and Miss H. Unwin (Vice-Chairman).

County Councillors Capt. W. G. Bagnall, T. J. Brooks, M.B.E., W. E. Dyson,  
W. T. Everatt and Mrs. L. Jones.

Added Members: Miss M. Hinchliffe, Miss G. Morris, Mrs. M. Singleton and  
Mr. F. Glasier-Foster.

### Representatives of West Riding Public Health and Housing Committee.

County Aldermen G. Probert (Chairman) and T. Tomlinson.

County Councillors J. T. Allan, Mrs. E. M. E. Atkinson, W. T. Blewitt, T. G. Fielding,  
A. Fletcher, A. Fouchard, N. Goodall, Mrs. M. Heald, J. W. Simpson  
and Mrs. E. Wragg.

STAFF.

School Medical Officer and County Medical Officer—T. N. V. Potts, M.D., D.P.H.

Assistant School Medical Officer—Reginald Lawrence, M.D., D.P.H.

School Oculists.

Christina S. Stoddart, M.B. Hannah W. Murphy, M.B., D.P.H.  
Claudius G. Kay Sharp, M.D. (part time).

School Medical Inspectors.

Centre							Name of Officer		
Skipton	...	...	...	...	...	...	James M. Anderson, M.R.C.S., L.R.C.P.		
Ilkley	...	...	...	...	...	...	...	...	Nora M. Allan, M.B.
Harrogate	...	...	...	...	...	...	Josephine Coupland, M.B., B.S., D.P.H.		
Halifax	...	...	...	...	...	...	...	...	Janet Macmillan, M.B., D.P.H.
Wakefield	...	...	...	...	...	...	...	...	Edward J. Tyrrell, M.D.
Leeds	...	...	...	...	...	...	...	Margaret E. Peaker, M.R.C.S., L.R.C.P.	
Pontefract (East)	...	...	...	...	...	...	James W. Cairns, M.D., D.P.H.,		
Huddersfield	...	...	...	...	...	...	...	...	Annabella Rennie, M.B.
Barnsley (West)	...	...	...	...	...	...	Jean V. Kirkwood, M.B., D.P.H.		
Pontefract (West)	...	...	...	...	...	...	Gertrude M. Mayhall, L.R.C.P., M.R.C.S		
Barnsley (East)	...	...	...	...	...	...	...	...	Jean J. Smith, M.B., D.P.H.
Doncaster (West)	...	...	...	...	...	...	Bethia M. Newlands, M.B., D.P.H.		
Doncaster (East)	...	...	...	...	...	...	...	...	Duncan C. Rice, M.B.
Sheffield	...	...	...	...	...	...	...	...	Stuart Lindsay, M.B.
Rotherham (North)	...	...	...	...	...	...	...	...	Lilian R. Davy, M.B., D.P.H.
Rotherham (South)	...	...	...	...	...	...	...	...	Rosie B. Becker, M.D., D.P.H.

School Dentists.

Skipton	...	...	...	...	...	...	...	...	Oswald A. Long, L.D.S.
Harrogate	...	...	...	...	...	...	...	...	Fred W. Buzza, L.D.S.
Huddersfield	...	...	...	...	...	...	...	...	George Kilvington, L.D.S.
Wakefield	...	...	...	...	...	...	...	...	Bernard R. Townend, L.D.S.
Pontefract	...	...	...	...	...	...	...	...	Kevern Batten, L.D.S.
Doncaster (East)	...	...	...	...	...	...	...	...	James M. Macdonald, L.D.S.
Barnsley (West)	...	...	...	...	...	...	...	...	John Mackay, L.D.S.
Barnsley (East)	...	...	...	...	...	...	...	...	Jeffrey Fletcher, L.D.S.
Rotherham (South)	...	...	...	...	...	...	...	...	Joseph Jackson, L.D.S.
Halifax	...	...	...	...	...	...	...	...	Cyril Baines, L.D.S.
Rotherham (North)	...	...	...	...	...	...	...	...	Rachel Sclare, L.D.S.
Sheffield	...	...	...	...	...	...	...	...	Jas. R. Wishart, L.D.S.

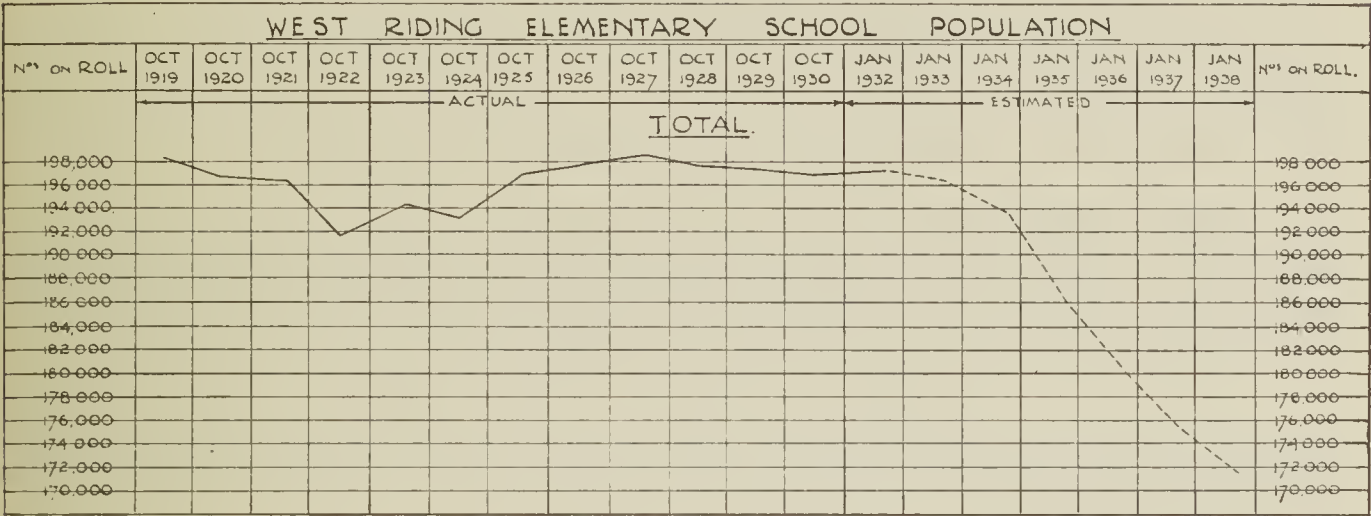
School Nurses who assist School Dentists (Whole time)	...	...	...	...	...	...	...	...	12
School Nurses only (whole time)	...	...	...	...	...	...	...	...	6
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School Nurses and Health Visitors employed by District Nursing Associations and Local Authorities	...	...	...	...	...	...	...	...	69
Clerical Staff, School Medical Inspection Section	...	...	...	...	...	...	...	...	6

REPORT  
of the  
SCHOOL MEDICAL OFFICER.  
for the  
Year ended 31st December, 1934.

The plan of this report follows that of 1933—based on instructions from the Board of Education. Its proportions vary according to the interest aroused by any particular activity—or to record matters for future comparison.

Staff changes are few. Dr. McMahon was succeeded by Dr. Smith in the Barnsley Area.

The fluctuations in the total school population show some likelihood of reducing the number of children in schools and this diminution seems likely to reach its lowest in 1938.



This will be to some extent offset by the increased survival rate of infants and the raising of the school leaving age which will not (according to Lord Halifax) have its full effect, *i.e.*, come into full operation until 1938. The effect of this on school medical inspection will be to keep the needs at a nearly uniform level. There is, in addition, a tendency to bring in for medical inspection and treatment other small groups such as those adolescents attending Technical or Art Classes.

If the movement for part-time schooling in connection with large businesses gains impetus and becomes a prominent feature of industrialism (see correspondence in *the Times*, January and February 1935), these, too, will probably come in for medical supervision, whether by officers of the Education Authority or Welfare Officers of the Industrial Firms is not clear but certainly by one or other.

In addition there has been, in the last two years, a growing volume of opinion, or a volume of opinion growing in expression, that the education of the adolescent in the future should be more and more away from the purely academic routine and, to a large extent, more towards physical culture.

Physical culture on an immense scale is more popular on the Continent than in England and our national temper may not take to formal gymnastics but rather to competitive games of skill.

If the trend of modern industry continues and basic requirement can be produced by machinery working shorter hours, it may be that the additional leisure given by this change will be used by young and old alike in physical culture (and craftsmanship). Taken in conjunction with the interest evinced in our minimum nutritional requirements at all ages, and especially in growing children, there seems to be no reason why this should not materialise successfully. The raw material is present and opportunity only needs to be seized. It has previously been the practice to see a "golden age" at some period in the past but it would be better to see one in the future and aim for it.

The subject of nutrition has again been prominent during the year and an additional survey has been made covering almost the whole of the County. Owing to the medical staff having received two or three accessions recently, and in order to revise the standards and attain something like uniformity of classification, a conference of School Medical Inspectors was called to discuss standards of nutrition. To this end a Senior Medical Officer of the Board of Education was asked to discuss the subject of nutrition with the School Medical Inspectors and afterwards to make visits to schools to carry out inspections to illustrate the principles of selection and adoption of standards.

This was done by visits to Featherstone and Grimethorpe—the former because it is usually adopted as a basic standard, and the latter because it, also, is almost purely a mining population and has been the subject of representation about the need for the provision of meals. The note of the proceedings was taken from the Memorandum which had been previously circulated—and especially the injunction that all children of sub-normal nutrition should be given the benefit of the doubt, and receive milk.



The contemplation of any haphazard crowd will easily convince the observer that there is great need for improvement both in physique and in nutrition. It would be a heartening spectacle to see adolescent youth largely occupied, in its leisure, in exercises promoting finer physique and fortified by an adequate nutrition.

The intelligent (by which I mean "medical") direction of these activities promises the best antidote to the slackening purposelessness of unoccupied leisure. The organization of leisure on the lines of physical culture along with creative recreation may initiate a revolution of the best kind.

**EXTENT OF AREA, NUMBER OF SCHOOLS, ETC.** The West Riding Elementary Education Area comprises 1,589,393 acres, and includes 836 Public Elementary Schools or 1,176 Departments, and in December, 1934 there were 189,308 scholars on the roll.

For educational purposes this area is mapped out into 116 districts, in each of which there is a District Sub-Committee, and these again are grouped into 23 Divisions, each with a Divisional Clerk as local representative of the Education Authority.

## 2.—Co-ordination.

No outstanding changes in this direction can be recorded although minor modifications and improvements in the machinery are of constant occurrence and move in the direction of expediting and facilitating the work. Efforts have to be directed towards securing greater efficiency—preventing overlapping and safeguarding professional people against devoting their time to clerical work at the expense of their strictly professional work.

It may be mentioned here that the boundary dividing the pre-school child from the school child—always a vague wavy line—tends to become less and less defined. The facilities for treatment, *e.g.*, for squint and dental caries are available in certain cases, and for orthopædic and ear disease cannot begin too soon. Apart from the 10,000 or more "under fives" already in elementary schools the provision of nursery schools will still further blur the line of demarcation.

The decision of the Education Committee to combine provision of premises for a Child Welfare Centre when building a new Council School in a district of rapidly growing population (Sprotborough) is also a pointer indicating the continuity of growth and development triumphing over artificial boundaries.

The Hospitals, through their almoners, continue to receive reports from our Health Visitors and School Nurses and, by this agency, to secure continuity and perseverance in treatment, especially in the case of children living some distance from hospital. The prolonged treatment necessary calls for much of "the grace o' continuance" on the part of the parents—generally the mother, and this is fortified by help from the "Distress Fund" towards the cost of railway and bus fares and the provision and renewal of surgical appliances.

The register of "Trained Masseurs" continues to be of great service in enabling some of these children to get treatment locally, for in most of the cases requiring massage, transport is probably the greatest obstacle to securing efficient treatment. Many problems arise in the course of the year in devising the most efficient means of carrying out treatment initiated at one of the large general hospitals.

It would be an advantage if Masseurs carrying out after-treatment could receive instruction direct from the Surgeon at the General Hospital in each case undertaken by them but this is not yet possible. It might be said without inaccuracy that the work of co-ordination is in progress all the time.

## 3.—The School Medical Service in Relation to Public Elementary Schools.

School premises are surveyed by the School Medical Inspector on the conclusion of the inspection. Adverse criticisms of the sanitary arrangements are forwarded to the School Medical Officer and ultimately reach the District Sub-Committee or School Managers responsible for the school. The shortcomings to which attention is drawn are (1) structural; (2) functional and (3) misuse, probably in inverse order of frequency. (1) There are a few schools where the sanitary arrangements are unsatisfactory even to the most indulgent judgment. (2) Occasionally there are complaints that the offices are not flushed sufficiently often and (3) more often they are not used as intended to be used and this entails increased work on the caretakers.

Medical Inspectors speak in warm commendation of the improvements which are continually being made in school premises, especially of the improvement in condition of school life by the installation of electric light—the greater provision of wash bowls (still in some places inadequate), the abolition of privies and the substitution of water closets—the warmer and brighter tints of the wall covering and the improvement of playgrounds.

The amount of apparently obsolete material for teaching purposes seems in some schools to be excessive and to demand overhaul from time to time. This, and the problem of limiting the amount of dirt carried into school on the children's shoes, are the most potent factors in the creation of a dusty atmosphere in school. The precipitation of dust on the walls in the neighbourhood of hot pipes and radiators seems to be incurable and produces an unsightly appearance.

The use of dust allaying preparations continues and its use is extending. One or two opinions have been expressed about its effect on health, viz :—that illness has been less since these

preparations have been used. This, however, is merely an opinion without statistical basis. The use of these preparations gives a dirty appearance to the floor and limits its use—its informal use—for Infants to sit on. **Dr. Macmillan** suggests getting over this by using cushions or rugs—but these, apart from their cost, would have to be found storage room when not in use.

4.—Medical Inspection.

The statistical tables provide an account of the number of children examined. The total examined during 1934 was 85,481, made up of 17,394 “entrants,” 20,157 “intermediates,” and 17,693 “leavers”; other inspections were 11,149 “specials” and 19,088 re-inspections. The figures in each group giving the defects found have varied very little from year to year. These are scrutinised carefully for this purpose, and although it is disappointing to have to record no diminution, it is pleasing to think of the value of bringing to notice defects which might otherwise have passed unnoticed.

5.—Findings of School Medical Inspection.

**CLEANLINESS.** The impression of School Medical Inspectors in this matter is of more value than a comparison of statistical returns furnished by different authorities. The impression is universal among the medical staff of this County that the standard is fairly good, and compared with the time when medical inspection had not yet come of age, is wonderful. The significance of this is more than a mere statistical record. It denotes a higher standard of home life—a greater care of child life and an upward trend of public opinion. Again the opinion is expressed that most of the children found to be verminous are without maternal care.

Clothing is only unsatisfactory in its excess. The child with inadequate clothing is very seldom met with but the overclad child often is. Features open to criticism are the pitiable retention of articles long after they have ceased to have real value as clothing. **Dr. Macmillan** expresses surprise that they (the children) do not bring their clothing which is in need of repair to the sewing class at school. Some sensitiveness about displaying frayed or ragged clothing in the class seems to be an insuperable object to this very desirable end.

**FOOTGEAR.** Several years ago it was mentioned that footgear gave the earliest indication of straitened circumstances at home—owing to the fact that clothes could generally be mended and footgear less so, with the result that it was worn long after it had ceased to be impervious to weather. In the past year the sampling of the school population for nutrition has been made the opportunity of noting the footgear and it has been a matter for surprised comment how very good much of it has been. Presumably this has been due to the various organisations which have provided boots.

Some secondary schools contrive to carry out the plan of wearing slippers in school. This lessens noise and dirt and is a wholly admirable procedure.

The use of rubber Wellingtons should be limited to keeping the feet dry out of doors. They should be discarded and replaced by slippers or shoes in school.

At the same time—in the poorest areas, the teachers on occasion report the absence of children from school because they have no boots.

**CHILD GUIDANCE CLINICS** are very desirable—not in large numbers—but one within the geographical boundaries of the County, especially in connection with children on remand. These since January 1st, 1934, have had to be examined and reported on according to the following schedule prescribed by the Home Office.

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE.  
EDUCATION DEPARTMENT.

Approved School Order: Record of Information.

E. MEDICAL REPORT on (Name of boy or girl).....

Is he (or she) generally sound and healthy? .....

Has he (or she) full use of:—

    (a) All limbs? .....

    (b) Eyesight? .....

    (c) Hearing? .....

Is there any history of fits? .....

Is his (or her) mental ability normal having regard to age? .....

(If this question cannot be answered in the affirmative, full information should be given as to mental condition and grading with a statement (if possible) either of the mental age or the intelligence quotient)



Does he (or she) suffer from incontinence of urine or fæces?	.....
Is he (or she) free from any cutaneous disorder?	.....
(If not, state nature of disorder)	.....
Is there any sign of tubercular disease?	.....
If so, the extent of any further examination and its results should be stated	.....
Is there any sign of physical or mental abnormality, not coming under the above headings?	.....
I certify that I have this day examined the above-named boy (or girl) with the results shown in this report.	
Signature .....	
Official description (if any).....	
Date.....	

The examination necessary to furnish the above information gives assurance about the delinquents' physical condition—freedom from skin complaints and tuberculosis and a rough estimate of intelligence level to ensure that the child shall not be sent to an approved school if he is certifiable as feeble-minded. In examining these children either at their own homes or in the Remand Home it is difficult to escape the feeling that the children require some further investigation. Speaking from memory—one boy broke machinery because working the machine involved long hours and probably great monotony—one repeatedly left home and took money because of (alleged) harsh parental control, and one set fire to some wood because it was so hard that working it in the machine which he had to use, caused him blisters on his hands. None of these pretexts stated baldly, as above, justifies the misdemeanours for which these children were convicted, but probably the cumulative effect of long continued resentment has led to results which would not be possible in healthy minded children.

An exact diagnosis of the factors leading to delinquency is the first essential. These delinquents are often somewhat retarded, though not certifiable as “feebe-minded” persons, and in consequence do not always see the consequences of their misdeeds or possess the power of judgment which would enable a child of average intelligence to resist the impulse which resentment suggests.

The cases quoted above realised the root cause of their delinquency and discussed it. There are other cases where the cause is forgotten though still operative and as one small boy naively said “I did it because naughtiness came into me.” In these cases possibly psycho-analysis might bring the cause to the surface and the frank discussion eliminate it. Psycho-analytic therapeutics remain *sub-judice* and it is still possible for the cynic to say that with its development in the United States the cases of delinquency have increased.

Psycho-analysis has had some disastrous results in adults as revealed in the daily press, and in the conversation of those who look on it with scepticism nearly akin to disfavour.

But in the end, it seems that to understand the whole circumstances *i.e.*, all the factors—of delinquency, would bring greater accuracy in dealing correctly with these children.

VISION. The employment of one part time oculist, in addition to the two whole-time officers has enabled the work to be done without too long an interval between the first selection of children by the School Medical Inspector and the further investigation and examination by the oculist. If this interval becomes very long, the parents not unnaturally conclude that no great importance attaches to it, and act with corresponding indifference. The above statement about the strength of the Oeulist's staff is not meant to ignore the fact that **Drs. Coupland and Kirkwood** do their own refractions and prescribing of glasses.

NUTRITION. The subject of nutrition in some of its aspects has been prominent not only in school medical inspection but also in the medical and, from there, to the lay press. Provided that the interest is disciplined and restrained by accurate knowledge not only will no harm ensue but the issue will be all to the good. The discussions in the lay press tend to centre round food requirements mainly, and perhaps rightly so. All enquiries into domestic economies show that in the poorest families the highest percentage of the household income is spent on basic food requirements; that as income rises the proportion of money spent on food also rises, but not in the same proportion, and to a certain extent some of it goes towards luxuries if that word may be used for articles which give variety to the diet without adding fuel to the body in proportion to their cost, *i.e.*, in a more expensive form of purchasing calories. This must not be taken as condemnation because some of these luxury items provide a welcome variety which in itself by avoiding monotony and improving the appetite may produce a more efficient digestion and assimilation of the food intake.

The stages of this discussion may be mentioned here. Physiologists have, by the study of healthy persons working under different conditions, reached a consensus of opinion on the number of calories expended in each type of occupation and hence the amount of different foods necessary to supply those calories.



This has been taken a step further by a Committee of the British Medical Association which went into the question of the cost of providing those calories. This is the first time that the caloric requirements have been so translated into pounds, shillings and pence.

A further step has been taken and the Report is expected shortly to translate those pounds shillings and pence—in the case of a child 5/- per week—into actual cooked food. The Report, it is anticipated, will be very explicit about quantities of each article required—the marketing and the cooking. The illustrations of the cooked food in an appetizing form will be a special feature. It should be of especial value to authorities supplying meals to school children as these meals seem to have a very narrowly circumscribed repertory.

Discussions in medical circles have turned largely on the question of “What is Malnutrition?” and emphasised the distinction which should always be kept in mind between “Physique” and “Nutrition” and the fallacies which these two variables introduce into the question of using a “height-weight” ratio as an index of nutrition.

It is at least a comforting assurance to find that previous reports in the series which have mentioned this receive confirmation on this point and one other:—“Any experienced clinician ‘could tell by looking at a person whether he was above or below what ought to be about his weight. **‘Nutrition was after all a clinical conception.’** (Dr. Robert Hutchinson, B.M.J. 1935 p.319).

The practice of assembling a class for parade and inspection in order to select the subnormal and illnourished children was sometimes adversely criticised as being an inadequate and unsound method, but in the hands of those whose interest is focussed on children and whose daily work consists in the assessment of fitness, it is a very good method and it is a welcome assurance to hear it authoritatively said that “Nutrition is a clinical conception.”

The general picture of the standard of nutrition obtaining throughout the County is that there are comparatively few children who can be pointed out as definitely ill-nourished though there are sub-normal children in considerable number. Dr. Macmillan (Halifax Area) who visited two districts outside her own area—Featherstone and Grimethorpe—both mining areas writes: “One of ‘the most interesting events to me this year was the visits to schools in these areas. To those of ‘us not accustomed to working in such districts the visit was a revelation. It seemed apparent that ‘our standards for grouping of children according to their state of nutrition were pretty well similar. ‘Nevertheless the shock of finding such a high percentage of really under-nourished children in ‘these districts was not quickly to be forgotten. While there are a good many cases of hardship in ‘this area (Halifax) and many families are hard put to it in making ends meet, still we have ‘nothing approaching conditions seen in the areas visited. We get individual cases as bad but they ‘are the exception not the rule.”

No numerical ratio yet devised is capable of expressing accurately a standard of nutrition in the individual, hence it is reasonable to suggest that the standard to be adopted is the highest standard of which each child is itself capable of attaining. The results of Convalescent Home treatment where the children have plain but well planned meals—abundant sleep—and regular hours—show that many—perhaps most children, and especially those with a lot of lee-way to make up, can be improved by these simple means out of all recognition. School medical inspectors almost without exception insist that some of the sub-normal children are below the average, not from actual shortage of food, but from ill-planned and ill-assorted meals. I may quote the experience of the Matron of a Fever Hospital that some of the children admitted do not seem to have seen a simple substantial cooked dinner before; and a number of children admitted to the Open-air School at Wombwell will refuse their meals with suspicion for a few days until they are reassured by seeing others eat theirs.

On the subject of sleep as a factor in nutrition it seems impossible to say more than has been said. If the result of the Daylight Saving Act has made it more difficult to “fold” the children in bed at an early hour, the popularity of **Wireless** has added a further impediment to the securing of sleep. There is no doubt that without a penny increase in income or the operation of any secret subsidy two achievements would raise the whole standard of nutrition (1) a realisation of food values and the will to cook and serve it and (2) a realisation of the value of sleep. This is suggested from another point of view. Dr. Mayhall in reporting on the children receiving meals at Featherstone says that “there are some who have not yet grown out of the sub-normal class.” \*That is not to say that the meals are worthless to these children. They may have prevented them from becoming actually ill-nourished. But as the meals are plentiful and unstinted, a child receiving them has opportunity for securing enough to meet all his needs. Obviously shortage of food is not the sole factor making for malnutrition.

\*In spite of having been on the free meals list for a year or more.

In cases such as these it would be very desirable to have a full investigation such as could be carried out in hospital where the whole environment and the daily routine could be arranged. In no other way can the cause of malnutrition be tracked down in the cases remaining obstinately unbenefited by adequate dieting.

One other point is worthy of emphasis. Dr. Mayhall suggests that malnutrition develops in some cases before the children enter school. Babies attending the Child Welfare Centres are in excellent condition at twelve months or more. At the age of two their attendances diminish and in spite of encouragement by Health Visitors they do not attend with any regularity and when they enter school at five they are then in an unsatisfactory condition of nutrition. There is no doubt that many toddlers do not find the conditions which make for good development. They want occupation *i.e.*, play in good surroundings, companionship, regular meals, adequate rest in the daytime and early bedtime. There is no doubt that the toddler often suffers from a period of comparative neglect.

The amount of milk provided for school children will be given in another section. It has increased enormously and the result cannot fail to be of great value.

Statements have been made in the press by teachers to the effect that there are in the schools children who, by reason of their poor nutrition, were unable to derive proper advantage of the instruction offered, but when nutritional surveys have been made none have brought forward examples of such children though regularly asked to do so and in many schools the head teachers have scouted the idea. This statement should in future not be made without being able to bring forward on request examples in justification of such statements.

The unfortunate position of milk lies in the lack of appreciation of it. It has a high food value at any time. It supplies some of the necessary ingredients of diet which are often deficient in the prevailing methods of feeding children and it contains some factor which promotes growth.

Its failure to secure adequate recognition depends on its price, for most poor people feel that they cannot afford it. It also depends on the fact that it is fluid—and therefore considered to be poor nutritive value—a fallacy which should be corrected by seeing curdled milk.

For many years it has been liable to sophistication and adulteration—the most cruel form of hardship to be inflicted on the poor purchaser—which the purchaser had no means of detecting.

It is liable to be the vehicle of infection, owing to the readiness with which cows become tuberculous and excrete tubercle bacilli in the milk. On the other hand the experiment of **Dr. Corry Mann** in adding milk to the dietary of orphanage children when that dietary in itself seemed adequate—showed that children who received milk progressed better than children (under exactly similar conditions) who did not.

**Dr. Corry Mann** has made further experiments—this time on himself. He describes himself as an average middle aged man, of average weight, doing average work, living the average life of a professional man, feeding himself generally on a diet which he has found most suitable to him. His diet which he gives in detail, will certainly absolve him from any suspicion of being over fond of the table. On this diet he was happy, he reduced his milk ration and became unhappy; he returned to normal diet and became happy again, he reduced his meat ration and retained his happiness. His normal diet contained 52.88 grms. animal protein. When he reduced his milk his protein was reduced to 43.48 grms. When he reduced his meat his protein was reduced to 41.80 grms. His conclusion is that milk protein is better than meat protein. “The protein of milk appears to be of more value for purposes of nutrition than the protein of meat.” As a result of deficient protein when he curtailed his milk **Dr. Corry Mann** experienced a slow, steady fall in weight with a general deterioration of physical condition. He adds that the result is only applicable to the individual in question. (*Medical Officer*, March 16th adapted.)

(There might be added that the caution as pointed out by the late **Dr. W. H. R. Rivers** that in all these experiments on human beings, unless the subject of the experiment is unaware when his intake contains the substance to be tested, the experiments are likely to be vitiated by a psychological factor of interest and expectation. For example, in testing the effect of alcohol the human beings experimented on had to take the alcohol in mixture and did not know on which occasion the mixture contained alcohol and on which it did not.)

At the same time it is clear that **Dr. Corry Mann** believes that his conclusions are valid for himself and probably of general application.

The position of milk in the dietary of school children appears to be unassailable and, once it is determined to provide it, the resources of the Health Department should be directed to securing a satisfactory supply—until this is attained, the milk must be safeguarded by pasteurization. This *when properly carried out* affects the nutritional value of milk to no more than a negligible degree.

The classification to be adopted in future by which the children are put into four grades, viz:—

- A. Excellent.
- B. Normal.
- C. Slightly Sub-normal.
- D. Bad.

will make it more easy to compare the standard with that of other Counties. If ill-nourished (Class D) children exist in any area it is an indication that the Provision of Meals Act should be put into force and any considerable number of sub-normal (Class C) children will mean the need for special alertness.

**SPECIAL SURVEY.**—In reading the statistical Tables IIA it should be remembered that until the two classes C and D given above are differentiated they are both added together and classified as “malnourished” in order to draw attention to them. The new method of classification will come into use in the Report for 1935.

The subject of Tonsils and Adenoids especially the question of Hospital Treatment was dealt with fully in the last report. This year a somewhat smaller number has been referred for treatment in hospital. This diminution reflects a trend in opinion that a considerable amount of judgment should be exercised in recommending operation. This of course is always expected. But the position of the operation for the removal of tonsils is this:—that mere enlargement of tonsils is not in itself a justification. Tonsils may be enlarged temporarily on account of inflammation which is recent and this enlargement may after a time disappear. In any case it is



advisable to look beyond the mere enlargement to the responsible cause. This has been found in a certain proportion of cases to be due to sepsis in the mouth. When this source of infection is removed the enlargement of the tonsil disappears. It is proposed shortly, when the dental staff is increased, to recommend dental treatment as a preliminary to operation (1) in order to get the mouth in good condition before the operation (2) in the hope that the removal of sepsis will obviate the need for operation. The need for removal of possible sepsis is equally necessary in those cases noted for observation.

After prolonged septic infection a tonsil which was at first enlarged may shrink from pathological processes and still be septic and remain a source of ill-health. In fact, the co-existence of other conditions, such as frequent illnesses associated with enlarged tonsils is another feature which is of importance in deciding on the sacrifice of tonsils. In addition there is the basic consideration that tonsils (and similar tissues) are greater in amount in childhood than in adult life and probably have greater functional importance.

It is probable, therefore, that there will be a further small decline in the number of children referred to hospital for removal of tonsils alone.

The removal of adenoids is in a somewhat different category. Although they are out of sight and only felt by a method of examination which is rarely used because it is so unpleasant, there is little difficulty in determining if the nasal airway is sufficient and excluding the few common causes—other than adenoids—of insufficiency. The co-existence of deafness makes operation a matter of urgency.

The hospitals, in spite of admirable operation facilities, neglect to advise and direct post-operative breathing exercises.

## DENTAL INSPECTION AND TREATMENT.

During 1934 the Child Welfare Sub-Committee considered a report which emphasised the fact that the dentists were unable to complete the inspection and treatment of elementary school children in their respective districts within a reasonable time, with the result that much of the conservative work (fillings, etc.) was lost, as, without continued attention, deterioration occurred. There was the added disadvantage that the importance of unremitting care of the teeth was not kept constantly to the notice of both parents and children. Owing to the size of their areas and of the school population an annual visit had become a physical impossibility. For this reason it was inconsistent to organise a propaganda campaign, as an avalanche of acceptances of treatment would have emphasised the fact that the dental surgeons were not able to deal with them.

The Report referred also to requests which have been received from time to time for dental inspection and treatment in **secondary schools**, and although it was highly desirable to extend the scheme to secondary schools it was impossible to do so without further reducing the dental services in elementary schools. There was to be considered in addition the question of giving dental treatment to "**under fives**" and to **expectant mothers**. (The National Health Insurance provides dental benefit in certain cases; the Tuberculosis Sub-Committee secures it for tuberculous patients, and the Public Assistance Committee provides it for its protégés.) It was pointed out that as the result of the large numbers of school children who presented themselves, "fillings and orthodontics" were sacrificed to "extractions," while the best aim of a dental service was to preserve the maximum number of teeth in functional activity.

After carefully examining the position of the County Council's Dental Service from all these angles, it was decided to recommend an increase in the number of whole-time dental surgeons and dental nurses in order to cope more satisfactorily with elementary school children and to deal in addition with pre-school and secondary school scholars. (It was decided that the dental treatment of nursing and expectant mothers would be undertaken more conveniently by private practitioners under an "open choice" scheme, similar to that in operation under the National Health Insurance Acts.)

If the Board of Education's estimate of the number of dentists for a given school population is taken, then the West Riding Schools would require at least thirty. It has been recommended that the following programme should be followed to meet the requirements of the service.

(a) That, subject to the approval of the Board of Education, 13 additional School Dentists, 14 Dental Attendants, one Grade "A" Clerk, one Junior Clerk and one Typist be appointed on the staff of the School Medical Officer at salaries in accordance with the County Council's Scale of Salaries for these appointments; that six Dental Clinics be established at convenient centres throughout the County for the treatment of children, and that the carrying out of the proposals be spread over a period of three years as follows:—

Year 1935-36.

Appointment of 5 Dentists.  
6 Dental Attendants.  
1 Grade "A" Clerk.  
1 Typist.

Year 1936-37.

Appointment of 5 Dentists.  
5 Dental Attendants.  
Establishment of 3 Dental Clinics.



Year 1937-38.

Appointment of 3 Dentists.

3 Dental Attendants.

1 Junior Clerk.

Establishment of 3 Dental Clinics.

(b) That the establishment of staff be amended as follows:—

1 Senior Dental Officer.

School dentists increased from 16 to 29.

Dental attendants ,, ,, 4 to 18.

It was pointed out in the same report that *pari passu* with the increase of staff there should be made provision of better facilities for the work in the shape of Dental Clinics of which there should be at least six. It has been pointed out that the work has been done in a host of different types of premises, many of which were unsatisfactory. While this is a tribute to the versatility and adaptability of the members of the service it is desirable now that some better provision should begin to be made for so important a service. The new Clinics will be devised on opportunist principles somewhere in the centres of large school populations so that they may serve for "gas sessions" and special re-inspection sessions. It may be necessary to hire a council house, to secure accommodation in one of the newer Child Welfare Centres or to have an *ad hoc* clinic built in connection with a new school. It may also happen that the re-organisation carried out by the Education Department may set at liberty some rooms in the existing schools which may be adapted for the purpose of a dental clinic. The Dental staff show considerable adaptability, *e.g.*, in dealing with small outlying schools. Taking a skeleton equipment with them they can deal with a number of the children, requiring only a selection of these patients to make a journey to a more central clinic. **Mr. Kilvington** points out that this scheme is much appreciated by parents and teachers.

Already one District Education Committee has made a protest about the surroundings in which dental surgery is done for school children and there is a growing feeling that the makeshift accommodation is inadequate, and should be (gradually) replaced by more permanent and adequate housing.

There is some reason to believe that heads of schools would be more enthusiastic in forwarding the value of dentistry if there was adequate accommodation available without encroaching on the classrooms or the teachers' rooms. It is quite conceivable that the head teacher who is already inconvenienced by giving up room to the dental surgeon will be lukewarm in any endeavour which will prolong that person's sojourn with him. With the increase of the Dental Staff it became necessary to create a post of Senior Dental Surgeon to assist the School Medical Officer and Assistant School Medical Officer in the co-ordination of the technical aspects of their work. While there is no wish to impose a wooden uniformity it is desirable that there should be some guidance to prevent too wide dispersal of aim. **Mr. Bernard R. Townend** was appointed to this post and began work on April 1st, 1935.

A special enquiry by **Mr. Fletcher** is reported in another section. I add some observations of **Mr. Wishart** (Sheffield). "In this year's work—most of the schools were in industrial areas, "and in these I find that teeth are in poorer condition than in agricultural areas. This is, I think, "due to the different type of food eaten in industrial areas, also to greater facilities for buying "sweets."

I have this year, made special note of those children receiving cod liver oil, and come to the reluctant conclusion that their teeth are no better than those of children receiving no cod liver oil. This I think leads to two possible explanations.

(a) That the calcifying effect of Vitamin D. is almost completely neutralised by the huge amount of carbo-hydrate consumed.

(b) That whilst Vitamin D. has been proved conclusively to influence calcification it is not given to children sufficiently early to have any noticeable effect on the teeth."

The subject of perfect mouths is of perennial interest and **Mr. Wishart** continues "At one "school I found four children in one family with sound teeth. This was so unusual that I interviewed the mother to ascertain if any special precautions had been taken. I learned that:—

1. They were all breast fed.
2. They had a plain mixed diet containing plenty of fatty food and vegetables.
3. Their breakfast bread was always fried in bacon fat.
4. They never ate new bread.
5. They had milk for supper.
6. They partook sparingly of jam.
7. As the family income was small few sweets were bought.
8. They had no tooth brushes but cleaned their teeth with a piece of rag dipped in salt.
9. They had cod liver oil at intervals but not as a daily routine.

"In the case of this family, I think the excellent condition of the teeth was not accidental "but due to the substitution of fibrinous foods for the usual viscid carbo-hydrates thereby making "the children use their teeth and develop their jaws."

**Mr. Townend** in a personal communication mentioned that the one characteristic found most frequently in "perfect mouths" is that the grinding surfaces of teeth are worn down and the surface is devoid of crevices in which the food can lodge and remain. A good deal of dentistry is

now being done to reproduce this perfectly plane surface on the grinding aspects of the teeth. It would be much better if children did this for themselves in the process of masticating food.

Putting it in another way "stagnation of food round any tooth is always taken as a sign of "a decayed or functionless tooth and one can therefore presume that pain is experienced there, "although not admitted by the child."

As a result of a resolution passed by the Bentley District Sub-Committee an enquiry was made among those families where dental treatment had not been accepted. The Dental Nurse made house-to-house visits to learn the cause of non-acceptance of treatment.

Parents interviewed.	Replies from parents.
7	Going to take child to own dentist.
18	Teeth not hurting—won't have them seen to until they do.
4	Do not believe in having children's teeth extracted.
3	Child not strong enough.
2	Won't have them out till the better weather.
1	Mother says the child would require to have false ones if she had them out.
1	Mother worried lest her child should be without second teeth.
9	Cannot afford it and not worrying about it.

## 6.—Infectious Diseases.

Disease.	Closed by Order of Local Sanitary Authority.			Closed by Local Education Authority.	
	Schools.	Depts.	Children under five.	Schools.	Depts.
Measles ... ..	22	14	1	—	—
Influenza and Colds ... ..	8	3	—	—	—
Mumps ... ..	2	—	—	—	—
Chicken Pox ... ..	8	1	—	—	—
Scarlet Fever ... ..	18	1	—	—	—
Whooping Cough ... ..	—	4	—	—	—
Diphtheria ... ..	7	1	—	—	—

During the year 1934 more than 3,000 cases of diphtheria were notified in the West Riding Administrative County Area, and as a result, the demand for diphtheria immunisation increased rapidly and over 16,000 children received the protective treatment.

The work has been carried out at schools and centres in the following districts:—

Urban District.	No. of children receiving the protective treatment during the year.	Urban District.	No. of children receiving the protective treatment during the year.
Altofts ... ..	245	Rothwell ... ..	100
Ardsley East and West ... ..	148	Saddleworth ... ..	169
Bingley ... ..	380	Slaithwaite ... ..	203
Birstall ... ..	86	South Crosland ... ..	100
Bolton-upon-Deane ... ..	612	Springhead ... ..	126
Darton ... ..	244	Stanley ... ..	65
Elland ... ..	11	Swinton ... ..	13
Featherstone ... ..	922	Thurnscoc ... ..	573
Garforth ... ..	293	Wath-upon-Deane ... ..	224
Golcar ... ..	371	Wombwell ... ..	285
Goole ... ..	250	Yeadon ... ..	34
Greetland ... ..	27		
Heckmondwike ... ..	68		
Hemsworth ... ..	498	RURAL DISTRICT.	
Hipperholme ... ..	350	Doncaster ... ..	34
Holmfirth ... ..	791	Goole ... ..	147
Honley ... ..	160	Great Ouseburn ... ..	210
Horbury ... ..	126	Hemsworth ... ..	1,691
Hoyland Nether ... ..	227	Hunslet ... ..	57
Linthwaite ... ..	240	Kiveton Park ... ..	274
Maltby ... ..	928	Pontefract ... ..	412
Marsden ... ..	440	Rotherham ... ..	316
Meltham ... ..	531	Tadcaster ... ..	451
Methley ... ..	233	Thorne ... ..	727
Mirfield ... ..	445	Wakefield ... ..	223
New Mill ... ..	160	Wetherby ... ..	140
Normanton ... ..	368	Wharfedale N. ... ..	50
Ripon City ... ..	251	General Practitioners, etc. ... ..	495



## 7.—Following-up.

The name of each child who is found to be defective in the course of medical inspection is handed to the school nurse who visits the home and interviews the parent with a view to treatment being carried out either by the local doctor or at the school clinic, a record being kept in a special register at school as to the progress of the case.

There are 6 whole time nurses on the staff who give their full time to school nursing, 112 health visitors who devote two-fifths of their time to school work and 69 district nurses who give a proportion of time to school nursing and health visiting.

The duties carried out under the heading of "School Nursing" comprise the following:—

### AT SCHOOLS.

- (a) Systematic cleanliness surveys.
- (b) Investigations of outbreaks of infectious disease.
- (c) Following up cases to see that treatment is being, or has been, carried out; that spectacles are worn regularly or are in need of repair, and that special exercises, etc., are done.

### AT CLINICS.

- (a) Attendance with the Medical Officer at the Treatment Clinic.
- (b) Attendance at the Clinics on specified mornings to treat minor ailments.

### VISITING HOMES.

- (a) Following-up children whose defects have not been remedied.
- (b) Interviewing parents concerning defects found; such as uncleanliness, bad clothing etc.
- (c) Ascertaining cause of irregular attendance at Clinics.

A summary of the work of the School Nurses is shown below:—

(1) Total number of visits paid to Schools	...	...	...	...	...	8,294
(2) Total number of examinations of children	...	...	...	...	...	455,297
(3) Total number of individual children found unclean	...	...	...	...	...	2,956
(4) Total number of visits paid to homes	...	...	...	...	...	33,771

## 8.—Medical Treatment.

The forms of medical treatment available for the school child are as before: (1) Own Medical Advisor; (2) the School Medical Inspector and Health Visitor at the School Clinic; (3) the District Tuberculosis Officer at the Dispensary, and—through him—Sanatorium and Hospital for Surgical Tuberculosis; (4) the County Oculist and Dentist; (5) the General and Cottage Hospital; (6) Beds rented by the West Riding County Council in open air special schools. The forms of treatment under (2), (3), (4) and (6) are provided by the County Council; those under (1) and (5) are private arrangements. The County Council has also a scheme for the operative treatment, in hospital, of children with tonsils and adenoids, ear disease and squint.

The grant to hospitals is £1,250 annually and this sum is allocated to the Voluntary Hospitals in proportion to the cases which are treated under the County's scheme.

The total number of children treated under the County's scheme in 1934 was 1,646 made up as follows:—

Tonsils and Adenoids	...	1,439
Squint	...	122
Middle Ear Disease	...	85
		—————
Total		1,646

No advance has been made in the Orthopædic scheme but representatives of the Leasowe Hospital (near Liverpool) called on the County Medical Officer and explained that owing to so many authorities having their own orthopædic schemes, and to a general decline in the incidence of orthopædic cases, fewer patients were being sent to Leasowe, and in consequence there were more beds available at the Leasowe Hospital.

A certain amount of orthopædic work is still being done in the West Riding and the after care of these devolves on the school medical inspectors and health visitors.

The treatment of errors of refraction, shows an increase (see Table IV) of nearly 2,000 children who underwent special examination by the county oculists, school medical inspectors and others but the number who received spectacles was smaller. Possibly there is a 'lag' in obtaining spectacles so that the numbers do not immediately follow the increased number prescribed.

The following classes of cases have been examined by the County Oculists:—

- (1) School children referred by school medical inspectors.
- (2) Children under school age referred from Child Welfare Centres (this co-operation is very much encouraged, to secure early treatment of strabismus).
- (3) Secondary School children, most of them being children who have been awarded scholarships and are about to enter a Secondary School.
- (4) Children who are candidates for Schools for the Blind, or for special schools. These are high myopes and partially blind.
- (5) Children who are leaving such institutions and entering upon training.
- (6) Adult applicants for registration under the Blind Persons Act.
- (7) Adults in Public Assistance Institutions.
- (8) Mentally Defectives in Institutions.
- (9) Candidates for Bingley Training College who require a considerable degree of correction for Myopia.



## ULTRA-VIOLET LIGHT TREATMENT.

The County Council possesses three Clinics for Ultra-Violet Light Treatment at Hemsworth, Denaby and Holmfirth. In addition it has arrangements with two urban authorities, Bingley and Wombwell, which are the authority under the Maternity and Child Welfare Act, 1918, and under this Act have installed Ultra-Violet Ray equipment for the treatment of babies and children under 5 years. By these arrangements the West Riding County Council is enabled to send school children for treatment at these two centres. The following attendances were made during the year.      Bingley 3,767      Wombwell, 1,949.

Treatment is also given at the Clayton Hospital, Wakefield and the General Infirmary, Leeds.

The Ultra-Violet Ray Clinic at Hemsworth is housed in the Child Welfare Centre within the grounds of the West End Council School. It is open on three days a week and is attended on one day by **Dr. Rice**. In all there were 129 sessions at 45 of which the doctor was present.

The Hemsworth Clinic is very popular and the local doctors co-operate by recommending for treatment such of their patients (from babyhood up to 14 years) as they think will profit thereby.

### REPORT ON HEMSWORTH ULTRA-VIOLET RAY CLINIC FOR 1934.

During the year 129 clinics were held, the doctor being in attendance on 45 of these occasions. 232 cases came for treatment, 2 of which were found to be unsuitable. Therefore 230 cases were treated. Of these, 56 were still undergoing treatment at the year end, 174 having been discharged. Of these 174, 39 left of their own accord, so that 135 finished their courses of dosage.

The results in these cases who completed their courses with regular attendance, have been particularly gratifying.

Below is a resumé of the types of case treated with the results obtained.

Disease.	No. of cases.	Results.
Rickets	17 cases	13 cured or very much better 4 improved
Debility	66 cases	45 cured 14 improved 7 little or no improvement
Chorea	6 cases	5 cured 1 slight improvement
Cervical Adenitis	7 cases	5 cured. 2 improved
T.B. Cervical Adenitis	6 cases	4 very much better 2 improved
Bronchitis (chronic)	8 cases	7 cured 1 no improvement
Bronchiectasis	2 cases	2 no improvement
Unresolved Pneumonia	1 case	1 very much improved
Impetigo	3 cases	All cured
Furunculosis	1 case	Cured
Subacute Rheumatism	1 case	Very much better
Fragilitus Osseum	1 case	Vastly improved
Septic Branchial Cleft	1 case	Sepsis cured
Spinal Curvature	1 case	No improvement
Bow Legs	1 case	Cured
Knock Knees	2 cases	1 cured 1 improved
Phlyctenular Keratitis	1 case	Cured

The Denaby Ultra-Violet Ray Clinic is held in an adapted part of the Baths belonging to the Miners' Welfare Institution.

The swimming baths are used by the school children for instruction in swimming and the hip baths have been taken out and their place converted into an Ultra-Violet Ray Clinic. This Clinic is not so successful as the Hemsworth Clinic as it misses the co-operation of the local medical practitioners.

During the year 133 clinics were held, the doctor being in attendance on 44 of these occasions. 71 cases came for treatment, 31 of which were still undergoing treatment at the year end. Therefore 40 cases were discharged. Of these, 3 left of their own accord so that 37 completed their courses of dosage, with the results shown in the following table:—

Disease.	No. of cases.	Results
Debility	24 cases	15 cured 9 improved
Chorea	8 cases	All cured
Rickets	3 cases	2 cured 1 slightly improved
Recurrent Bronchitis	1 case	Cured
Paralysis of Legs	1 case	No improvement

The Holmfirth Ultra-Violet Ray Clinic is held in the premises of the Child Welfare Centre, and is supervised by **Dr. Muriel Wilby**.

The Clinic is open in Holmfirth on two mornings a week during the winter months. Delay in starting work at the beginning of 1934 was caused by trouble with the lamp which is a Jesionek Mercury Vapour, so that the Clinic was open in all 38 times. 43 children attended for treatment, 4 ceased attendance and 39 completed the course. The type of case treated was mainly the debilitated and malnourished child. 3 cases of leg deformities (rickets) treated with considerable improvement. One case of severe bronchitis and asthma referred from the D.T.O. showed no improvement. In 21 cases there was a distinct gain in weight.

Many parents volunteered the statement that their children had eaten better, slept better and been less fretful.

The majority of parents asked for their children to have a further course of treatment.

At Bingley the children are selected by **Dr. Nora Allan** and the treatment is supervised by **Dr. O. T. Wade**, Medical Officer of Health for the Bingley Urban District Council and his report is given *in extenso* below.

The number of children on the register for 1934 was 145, compared with 103 in 1933, a third of this number receiving two or more courses of artificial light. The total number of attendances was 3,767 as compared with 2,815 in 1933. The number of treatments given, including massage, re-educational and remedial exercises, was 3,843. Of the cases attending, 57 were much improved, 66 improved, 15 in statu quo, 7 discontinued.

Conditions submitted to artificial light during 1934 include debility following infectious diseases, anæmia, malnutrition, rickets, bronchitis, asthma, enlarged cervical glands, cervical adenitis, surgical tuberculosis, rheumatism, boils, chorea, and heart.

Most of the above cases came under the West Riding Education Committee's scheme for school children, and children under five years of age from the Maternity and Child Welfare Clinic. Others receiving applications of Ultra-Violet Light for post-diphtheritic debility, debility following general sepsis due to dental extractions, tubercular glands, cervical adenitis, and deficiency diseases, were recommended by private doctors.

Three sessions weekly was the routine; treatment in some cases was administered bi-weekly and results noted at the end of each course. Equipment of the light room includes a mercury vapour lamp, Percy Hall pattern, with evacuated type burner, and revolving disc localiser and a multiple carbon arc lamp with mechanical slip grip feed for group treatments, using cerium iron and boron cored carbons.

Debilitated cases responded rapidly to treatment, and some were markedly improved. The outlook is not so encouraging in anæmia and malnutrition; good results have eventuated in some cases after several courses of light, while others have only shewn temporary improvement.

Any appreciable progress from general irradiation in treating rickety deformities such as femoral and tibial curves, apparently corresponded with the rate of growth of the child.

If a patient suffering from bronchitis was found to be unduly susceptible to the first application, small doses graded with regard to sensitivity have apparently cleared up the condition favourably.

While inhalations of the fumes emitted from the Tungsten arc lamp are admittedly preferred for the relief of asthmatical symptoms, substitution of the carbon arc for this purpose has proved of considerable value, and by adoption of this method, attacks appeared less frequent, in two cases finally subsiding, while these cases remained under observation.

Carbon arc treatment has proved advantageous in several cases of rheumatism, and in surgical tuberculosis improvement was maintained by grading the dosage and submitting the patient to the rays from both mercury vapour and carbon arc lamps.

Enlarged cervical glands tend to subside with several applications and gave promising results, adenitis was materially benefited, and sinuses dried up.

Small doses of light (mercury vapour) have been found beneficial in cardiac troubles, other than valvular disease, the tolerance of the patient being taken as the factor for determining the initial dose, apart from the sensitivity of the skin.

With regard to chorea, while restored co-ordination of movement has proved satisfactory in some cases, various results have been recorded in others.

General reactions to light during the first fortnight under treatment is a noticeable feature, a child unduly susceptible evincing symptoms of intolerance, including increased irritability, headache, nausea, loss of appetite, diarrhoea. In some cases loss of weight during this period was followed by steady gain in weight. It was not found necessary to suspend treatment in these cases, although subsequent doses were cut down.

The results of treatment on the whole were satisfactory. The majority were benefited in a greater or less degree, as shewn by gain in weight, increase in height, and capacity for exercise and work.

Treatment was contra-indicated in a small percentage and was discontinued, cardiac, kidney trouble, and acidosis supervening, and several cases left prematurely.

In addition to those enumerated above, massage and exercises were given to polio-myelitis, hemiplegia, pseudo-hypertrophic paralysis, scoliosis, kyphosis, lordosis, and flat foot. One child came under the school authorities, another under five years of age from Maternity and Child Welfare, several were recommended by private doctors, no facilities for out-patient treatments of Ultra-Violet Light, massage and special remedial exercises being available at the local hospital. Others were referred to Bradford Children's Hospital.

Owing to continued and increasing applications for treatment, it is generally felt that if the artificial light clinic could be established as a treatment centre for those children with crippling conditions in the Bingley area, time and expense incurred in visiting orthopaedic departments of various hospitals might be spared, and the scope of the clinic considerably extended.

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**Dr. Pickup**, the Medical Officer of Health for the Wombwell Urban District Council supervises the treatment at the Wombwell Clinic and his report is subjoined.

#### REPORT ON THE TREATMENT OF SCHOLARS AT THE WOMBWELL RAY THERAPY CLINIC.

The number of scholars treated during the year was 98. They were sent in batches of a dozen or so, and each batch was treated for an average of about eight or nine weeks, having two baths per week.

The diseases for which they were sent for treatment were debility 45; anæmia 43; bronchitis 3; eczema and impetigo 3; rickets 3; blepharitis 1.

Almost all the cases showed some improvement, whilst the majority of cases showed marked improvement.

Some of the cases of anæmia showed little or no improvement. 78 of the 98 cases showed definite gains in weight—varying from a few ounces to 6-lbs.

11 cases lost in weight—though only a little, whilst 9 remained stationary.

“Sleeping better” and “more vigour” were prominent observations of many of the parents in most of the cases.

Two months treatment appears to be rather too little for some cases of anæmia, especially when their attendances are somewhat irregular.



## SCHOOL CLINICS.

The following is a list of School Clinics established by the County Council, all of which, with the exception of those marked \* being in conjunction with the Infant Welfare Centres. The Clinics are chiefly held in the mornings by the School Nurses, who refer any cases requiring medical advice to the Medical Officer of the Welfare Centre.

Name and Address	Day of Meeting
Adwick-le-Street, Woodside Methodist Chapel, Woodlands	Monday, Thursday
Airedale, Holy Cross Hut	Monday, Friday
Armthorpe, Miners' Welfare Institute	Monday, Thursday
Allerton Bywater, Miners' Welfare Institute	Monday, Thursday
Ardsley East, Primitive Methodist Chapel	Tuesday
Ardsley, West, No. 1, Syke Lane, West Ardsley	Monday
Askern, Baptist Sunday School	Tuesday
Baildon, Wesleyan Chapel	Wednesday
Bentley, Welfare Pavilion	Wednesday, Friday
Bramley, Miners' Welfare Hall	Wednesday
Birkenshaw, Methodist Free Church	Tuesday
Birstall, Methodist Schoolroom, Huddersfield Road	Monday, Wednesday
Birdwell, United Methodist Church, Chapel Street	Wednesday
Chapelton, Miners' Welfare Pavilion	Wednesday, Friday
Carcroft, Presbyterian Sunday School	Thursday
Conisbrough, Army Hut, Balby Street Council School	Mon., Tues., Wed. (Afternoons) Thurs., Fri. (Mornings)
Conisborough Upper, Miners' Welfare Institute	Monday
Crofton, Council School	Monday
Cudworth Wesley Hall	Wednesday, Friday
Dalton, Primitive Methodist Chapel	Wednesday, Friday
Darfield, Wesleyan Sunday School, Barnsley Road	Wednesday, Friday
Darton (Staincross) Wesleyan Sunday School, Barnsley Road, Mapplewell	Thursday
Darton (Gawber) Adult School	Tuesday
Dinnington, Wesleyan Sunday School	Tuesday, Friday
Dodworth, Mechanics' Institute, High Street	Tuesday, Thursday
Drighlington, Wesleyan Sunday School	Monday, Friday
Dunscroft, Church Hall	Tuesday, Friday
Elland, Drill Hall	Wednesday
Edlington, Primitive Methodist Chapel	Tuesday
Earby, Old Grammar School	Wednesday
Farsley, United Methodist Church	Tuesday, Friday
Ferrybridge, Wesleyan Chapel	Thursday
Garforth, St. Mary's Hall	Monday
Guiseley, Baptist Church, Oxford Road	Thursday
Glasshoughton, St. Paul's Institute	Monday, Wednesday, Friday
Golcar, Council Offices	Wednesday
Greetland, Clay House	Tuesday, Thursday
Greasborough, Town Hall	Monday, Thursday
Haworth, Council School, Butt Lane	Tuesday, Friday
Hebden Bridge, Pitt Street Secondary School	Wednesday, Friday
Hemsworth, Army Hut, West End Council School	Every morning
Hemsworth (Fitzwilliam) Church Hut	Monday, Wednesday
Horbury, Wesleyan Sunday School	Monday, Friday
Hoyland, Miners Welfare Institute	Tuesday, Friday
Hoyland Common, Wesleyan Chapel	Thursday
Holmfirth, Town Hall	Thursday
Horsforth, St. Margaret's Hall	Wednesday
Hipperholme, Wesleyan Sunday School	Monday
Kippax, Church Hut	Tuesday (Thursday, alternate)
Kirkburton, Council School	Tuesday
Knaresborough, Fysche Hall Cottage, Isles Lane	Monday, Thursday
Knottingley, Secondary School, Chapel Street	Monday, Wednesday, Friday
Lepton, Liberal Club	Tuesday, Thursday
Slaithwaite, United Methodist Sunday School, Carr Lane	Wednesday Friday
Maltby, Congregational Chapel	Monday, Thursday
Meltham, Baptist Church	Tuesday
Mirfield, Ings Grove	Monday, Friday

SCHOOL CLINICS.—continued.

Name and Address	Day of meeting
Marsden, Conservative Club	Thursday
Milnsbridge, Bungalow, 93, Manchester Road	Tuesday
Normanton, Park Pavilion	Monday, Wednesday
	Thursday, Friday
Otley, Primitive Methodist Chapel, Station Road	Thursday
Oulton, Village Institute	Tuesday, Friday
Outwood, Church Institute	Monday, Wednesday, Friday
Penistone, Shrewsbury Methodist Chapel	Monday
Queensbury, Cricket Pavilion	Tuesday, Friday
Rawmarsh, Spiritual Temple, Parkgate	Monday, Tuesday
	Wednesday, Friday
Ripon City, Alma House	Monday, Thursday
Royston, Wesleyan Sunday School	Wednesday, Friday
Rossington, United Methodist Church	Tuesday, Thursday
Saddleworth, Mechanics' Institute, Uppermill	Wednesday
Selby, Museum Hall, Park Street	Tuesday, Friday
Sharlston, St. Luke's Hall	Tuesday, Friday
Stainforth, New Wesleyan Church	Tuesday, Friday
Silsden, Ambulance Station, Kirkgate	Tuesday
Skipton, Wesleyan Methodist Sunday School	Wednesday, Friday
Water Street	
Stocksbridge, Mozart House, Manchester Road,	Tuesday, Friday
Deepcar	
Sowerby Bridge, Allan House	Tuesday, Thursday
Stannington, Underbank Chapel	Wednesday
Swinton, Rock House	Monday, Thursday, Friday
Stanley, Zion Congregational Chapel	Monday
Tadcaster, Shann House.	Tuesday, Friday
Thorne, Temperance Institute	Monday, Wednesday
Thorne (Moorends) Wesleyan Chapel	Tuesday, Thursday
Thurcroft, Miners' Welfare Institute	Monday, Thursday
Thurnscoe, Church Sunday School, High Street	Monday, a.m.
Wath-on-Dearne, Wesleyan Assembly Hall,	Monday, Wednesday
Chapel Street	Thursday, p.m.
Wath-on-Dearne (West Melton) Wesleyan Chapel	Tuesday
Whitwood, Memorial Hall	Monday, Wednesday
Worsborough, Wesleyan Sunday School (Dale)	Tuesday, Thursday
Yeadon, Temperance Hall	Friday
*Bingley, Mornington Road Council School	Monday, Friday
*Bolton-on-Dearne, Council Offices	Tuesday, Wednesday
*Castleford, Wesley Street	Every morning
*Featherstone, Methodist Free Church	Every morning and
	Thursday afternoon
*Goole, Dunhill Road	Monday, Wednesday, Friday
*Heckmondwike, Green Side	Every morning
*Mexborough, New Evening School	Every afternoon
*Robin Hood, Infants' Council School	Friday afternoon
*Rothwell, New School Clinic	Friday morning
*South Elmsall, Miners' Institute, Moorthorpe	Tuesday, Friday
*Stourton, Council School	Wednesday, p.m.
*Wombwell, Free Library	Monday p.m., Tuesday a.m.,
	Wednesday p.m.
	Thursday a.m. Friday p.m.
*Wombwell, Jump Council School	

\*School Clinics only.

List of Special Schools and Special Classes to which Defective children  
are sent and the types sent to each school:—

Name of School	No. of W.R. children in attendance on 31/12/1934.
<b>DELICATE CHILDREN.</b>	
East Anglian Sanatorium, Nr. Colchester	45
West Kirby Convalescent Home, Nr. Liverpool	19
Oak Bank Open Air School, Sevenoaks	39
Brighthouse Open Air School	4
Wombwell Open Air School	59
	166
<b>MENTALLY DEFECTIVE CHILDREN.</b>	
Leeds, Armley Park Special School	1
Northamptonshire Home for Girls	1
Knotty Ash Horticultural Special School, Nr. Liverpool	3
Mary Dendy Home, Sandlebridge	3
Allerton Priory R. C. Special School, Liverpool	2
Oldham, Chaucer Street Special School	2
Bradford, Margaret McMillan Special School	3
Besford Court Mental Hospital, Worcestershire.	1
Halifax, Quarry House Special School	3
Sutton Bonnington Special School, Nottingham	2
Leeds, East Leeds Special School	1
	22
<b>BLIND AND PARTIALLY BLIND CHILDREN.</b>	
Leeds, Blenheim Walk Home	35
Henshaw's Institution for the Blind, Manchester	2
Royal Blind School, Sheffield	22
Fulwood Homes for the Blind, Preston	3
Bradford Daisy Hill Myopic School	5
Southport Sunshine Home for Blind Babies	2
Liverpool Blind Asylum	1
Oldham Gower Street Special School for the Blind	1
Court Grange Special School, Abbotskerswell, Devon	3
Yorkshire School for the Blind, York	1
	75
<b>DEAF CHILDREN.</b>	
Yorkshire Institution for the Deaf, Doncaster	85
Leeds, Blenheim Walk Home for the Deaf	23
Royal Schools for the Deaf, Manchester	14
St. John's Institution for the Deaf, Boston Spa	4
Oldham, Gower Street Special School	3
Royal Institution for the Deaf, Derby	1
Rayner's Residential School, Penn, Bucks.	1
	131
<b>CRIPPLED CHILDREN.</b>	
Leasowe Children's Hospital	21
Heritage Craft Schools, Chailey	23
St. Michael's Orthopædic Hospital, Clacton-on-Sea	1
Heswall Hospital, Liverpool	6
Heatherwood Hospital, Ascot	1
Marguerite Home, Thorp Arch	1
Children's Rest, Sefton Park, Liverpool	8
Ethel Hedley Hospital, Windermere	1
Stanmore Hospital, Middlesex	1
St. Vincent's Orthopædic Hospital, Pinner, Middlesex	1
St. Roses R. C. Special School, Stroud	1
Halliwick Cripples Home, Winchmore Hill, London	4
	69
<b>EPILEPTIC CHILDREN.</b>	
Starnthwaite Epileptic Colony, Nr. Kendal	4
Maghull Home for Epileptics	2
Lingfield Epileptic Colony, Surrey	2
	8



## 9.—OPEN-AIR EDUCATION.

### WOMBWELL OPEN-AIR SCHOOL.

The school has accommodation for sixty children. It is a mixed school and the children are drawn from the neighbouring area—a limit to the radius being imposed only by the difficulties of transport.

An emergency during the year showed that it could serve a useful purpose in meeting the case of odd children found to be suffering from malnutrition, e.g., in a school where there was one child definitely ill-nourished but not sufficient of that class and the next class of “subnormal nutrition” to warrant the provision of meals, this one child was drafted to the open air school though somewhat outside the normal ambit of the school. It was more convenient to provide transport than to provide meals for one.

The routine remains much the same except that the milk ration which used to be issued at about 10.50 is now given as soon as possible after the children assemble. A further modification suggested, viz., to give it as cocoa—was favourably entertained and then abandoned when it was found to be contrary to the agreed conditions of the Milk Marketing Board.

The school accommodation (60 places) was not used quite to the full. Three children left at the end of the year on attaining the age of 14 years.

1. Girl gained 26-lbs. in 22 months and her condition (enlarged glands) was much improved.
2. Girl gained 10-lbs. in 9 months, and her anæmia was slightly improved.
3. Boy gained  $\frac{1}{2}$ -lb. in 9 months. Failure to benefit caused him to be referred to the District Tuberculosis Officer who has sent him to a sanatorium.

The average stay of these children was  $13\frac{1}{2}$  months and average gain in weight was  $12\frac{1}{2}$ -lbs.

Three children left in July 1934—cured.

1. Boy only gained  $\frac{1}{4}$ -lb. in weight in 4 months in 1934, suffered from bronchitis and frequent colds. This improved first and he later gained 5-lbs. in 9 months.
2. Boy had slight chorea at the Open Air School but was cured before he left. He gained  $2\frac{3}{8}$ -lbs. in 4 months in 1934 and a total of  $9\frac{1}{2}$ -lbs. in 23 months.
3. Boy gained  $\frac{1}{4}$ -lb. in 5 months but lost his chronic bronchial catarrh. He made a total gain of  $7\frac{1}{2}$ -lbs. in 17 months.

The average stay of these was  $16\frac{1}{3}$  months and their average gain in weight  $7\frac{1}{4}$ -lbs.

A girl admitted in March died in October of the same year, probably of tuberculosis, but she scarcely attended the school.

Progress of children who have been at the school since 1932 (*i.e.*,  $2\frac{1}{2}$  years). The gains in weight vary from 9-lbs. to 24-lbs. and the average for boys (11) is 11-12-lbs. and for girls (7) 16-17-lbs.

For children admitted since 1933, the corresponding average is boys  $10\frac{1}{4}$ -lbs. and girls  $11\frac{1}{2}$ -lbs.

For children admitted in 1934 the corresponding averages are boys  $4\frac{1}{2}$ -lbs.; girls  $3\frac{1}{2}$ -lbs.

The records mentioned before illustrate the fact that the gain in weight is not made immediately. There may be a period during which little or no progress is made as recorded by the weighing machine but unmistakable progress in general condition. After this physical improvement has been secured—and it may be assumed—a general increase of physical efficiency—then the weight begins to increase.

The defects for which children were admitted were:—

Debility	...	...	...	...	...	...	...	...	...	17
Debility and Anæmia	...	...	...	...	...	...	...	...	...	12
Anæmia	...	...	...	...	...	...	...	...	...	3
Bronchitis	...	...	...	...	...	...	...	...	...	5
Enlarged glands	...	...	...	...	...	...	...	...	...	6
Anæmia and enlarged glands	...	...	...	...	...	...	...	...	...	4
Debility, Anæmia and enlarged glands...	...	...	...	...	...	...	...	...	...	1
Debility and enlarged glands	...	...	...	...	...	...	...	...	...	3
“Old spinal trouble” and debility	...	...	...	...	...	...	...	...	...	1
Old T.B. hip and debility	...	...	...	...	...	...	...	...	...	1
Nervous debility	...	...	...	...	...	...	...	...	...	1
Asthma	...	...	...	...	...	...	...	...	...	1

Co-existing physical defects were :—

Enlarged tonsils.	11. One cured by operation—others advised as to treatment.
Tonsils and adenoids	2. Operation advised in one case.
Defective vision.	8. Either wearing glasses or glasses had been prescribed.
Otorrhœa ... ..	2
Blepharitis ... ..	1
Hernia ... ..	1
Infantile paralysis ... ..	1
Cardiac debility ... ..	5
Nephritis ... ..	1

(This child has not been at school for a long time.)

During the year one child had chorea, one had scarlet fever and one diphtheria.

It is noticeable how frequently “debility,” either alone or in conjunction with other physical defects occurs in the list of causes for which a child has been transferred to the open air school.

Dr. Jean Kirkwood, who supplies the above figures, is mainly responsible for the medical oversight of the children and the periodic revision of the waiting list. It was hoped that medical practitioners in the area might be interested in the school—and to this end they were invited to be present at the opening ceremony—but did not attend. It was supposed that they might make recommendations in the case of their children patients—who were convalescent after illness or possibly, having inside knowledge of some homes where straitened circumstances existed, might make some suggestions for the admission of children as a preventive of malnutrition.

10.—Physical Education.  
(see 1931 Report).

11.—Provision of Meals.

MEALS WERE PROVIDED UNDER THE PROVISIONS OF THE EDUCATION ACT, 1921 (SECTIONS 82–84) AT THE FOLLOWING CENTRES.

YEAR ENDED 31ST DECEMBER, 1934.

Centres at which meals have been supplied	No. of meals (dinners) supplied to certified children during the year.		
	Free	For Payment	Total
Featherstone Salvation Army	34,923	666	35,589
Featherstone Snyderdale Council	10,999	875	11,874
Featherstone C.E.	3,917	—	3,917
Featherstone Loscoe Grove Council	5,216	155	5,371
Hoyland Common United Methodist	13,519	—	13,519
Hoyland King Street	14,711	—	14,711
Hoyland R.C.	17,282	81	17,363
Hoyland Council	21,468	—	21,468
Dalton Wesleyan Reform (closed 2nd November, 1934)	4,219	—	4,219
Thrybergh St. Peter's (closed 2nd November, 1934)	11,786	—	11,786
Thrybergh R.C. (closed 2nd November, 1934)	2,421	—	2,421
Bolton Percy Council	1,474	—	1,474
Farsley Frances Street Council and Wesley Street Council	775	—	775
	142,710	1,777	144,487

## Subsidiary Nourishment.

	Number of Issues.			
	Certified		Non-Certified	
	Free	For Payment	For payment	Total
(a) Milk	4,918,531	279,168	7,749,087	12,946,786
(b) Cod Liver Oil	2,661,023	64,547	259,828	2,985,398
Total ..	7,579,554	343,715	8,008,915	15,932,184

Subsidiary nourishment was supplied at 772 centres (1,111 depts).

## 12.—School Baths.

The following are the comparable figures for 1934 and 1933:—

	Total number of children who have received instruction			Total number of attendances made			County Council Certificates gained		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1934	10,296	9,546	19,842	114,183	102,058	216,241	1,820	1,327	3,147
1933	9,737	9,136	18,873	104,654	93,396	198,050	1,740	1,130	2,870
Total Expenditure									
1934	£3,290 13s. 10d.			Average cost per child per attendance			3·65 pence		
1933	£2,831 4s. 5d.						3·43 pence		

## 13.—Co-operation of Parents.

This continues to be good with specified exceptions. Parents in considerable numbers attend the inspection of Entrants—perhaps to lessen their children's apprehension—but more often to discuss their condition and health. They do not so often come to the inspection of "leavers" when they very well might hear something to their children's advantage. This time, too, the children may have some influence—having by now become sensitive and afraid of appearing "over-mothered."

They fail us in the matter of insisting on their children wearing the spectacles provided for them, and sometimes they decide that their children are too young for dental treatment when the dental surgeon offers it, knowing that it is necessary. Sometimes they decide by inspection of their children's mouths that treatment is not necessary in cases when the dentist wishes to eliminate fissures.

This attitude will alter in process of time, and in quite recent years there has been a noticeable advance in public opinion on the subject of preservation of the teeth. Addresses on the subject to parents assembled on "Open Days" are calculated to bring about this advance more than any other activity.

"There is still much prejudice against 'fillings' but more against the word than the 'operation, in many cases where 'fillings' have been refused I have found that if 'restoration of the tooth' has been offered it has been gladly accepted. In fact it seems that any form of treatment will be accepted so long as the words 'filling' or 'stopping' is not mentioned." (Mr. Batten).

After suggesting "filling" two teeth for a child Mr. Kilvington received a note from the mother:—

"Dear Sir,

I am very sorry only I do not want this girl to have any teeth filled. It runs bad in the family having teeth *preserved*.

Yours sincerely,  
Mrs. ———"

"We don't believe in 'fillings' because Betty had to have a tooth out which had been filled "8 years ago."

"Please can my little girl be done at 4 o'clock because I have to get my hair permed at "2 o'clock."

One man wrote that "he wasn't going to have his girl's teeth 'done' because the County "Council did him out of £2,000 at the beginning of the War"—an example of non-co-operation to his daughter's disadvantage.

Mr. Buzza pertinently asks:—"Shall we give them what they want or what we think they ought to want?"



## 14.—Co-operation of Teachers.

In medical inspection the teachers can do an enormous amount of good by the support which they give to the advice of the medical inspector. The preparation for the inspection devolves on them, and on their administrative capacity and organisation depends the smooth (and swift) running of the work. The first discovery which a new medical inspector makes is that the success of medical inspection varies with the degree of co-operation which the head teacher gives. Such small things as providing the most comfortable accommodation for parents immensely enhances the success of the work.

The dentists, who make a longer sojourn at any school, gratefully acknowledge the giving up of the teachers' own rooms for the accommodation of the dental clinic. One suggests that a special letter of thanks should be sent to those whose co-operation is outstanding and noteworthy. It might be invidious to do so. I will content myself with thanking them all and trust that they will all ultimately realize that the medical and dental service is their first ally.

## 15.—Co-operation of School Inquiry Officers.

(See 1928 Report).

## 16.—Co-operation of Voluntary Bodies.

(See 1922 Report).

## 17.—Blind, Deaf and Epileptic Children.

(See Table III).

These children appear in various sections of Table III. The whole group of children comprised in Table III are as far as possible allocated to the school medical inspectors for supervision and periodic report. The work of supervision is generally done at some time when, for one reason or other, the elementary schools are closed.

## 18.—Nursery Schools.

The Board of Education have recently approved plans for the provision of a Nursery School at Castleford and work will begin on building almost at once.

## 19.—Secondary Schools.

(See 1932 Report).

## 20.—Continuation Schools.

(See Report for 1922).

## 21.—Employment of Children and Young Persons.

The children examined under this heading, viz., 880, were practically all to be employed in the distribution of newspapers and milk.

## 22.—SPECIAL REPORT.

(By Mr. J. Fletcher, L.D.S.).

### Breast-feeding and Immunity to Dental Decay with special reference to the Upper Central Deciduous Incisors.

The problem of immunity to dental decay is one that looms large in dental literature at the present time. Mrs. Mellanby claims that vitamin D is essential to the good calcification of the teeth and that imperfections in the calcification of a tooth predispose that tooth to decay, or in other words that dental caries is largely due to an insufficiency in the vitamin D intake. Mr. E. Sprawson claims that a daily ration of raw milk will produce and maintain immunity to decay in all teeth erupting after the commencement of daily raw milk. In support of his thesis, in addition to a number of children in institutions who receive a daily ration of raw cow's milk, he instances certain primitive races who breast feed their children for a much longer period than is customary in civilised countries. These two quotations from recent writings of his will serve to illustrate his contention. "It seems that all primitive races who suckled their young till past 'the time of eruption of the deciduous dentition, such as Australian aborigines, African races, Eskimos and others, had an absolute immunity to dental caries in that dentition as far as is 'known.'" (p. 2 "Influence of Raw Milk on Teeth and Growth," E. Sprawson, reprinted from 'Birmingham Medical Review,' (Vol. VII, December, 1932) and "African races, generally speaking, 'breast-feed their children for from two and a half to three years, so if this hypothesis is correct 'should have the deciduous teeth immune to caries, but not the permanent teeth; I am informed 'by H. Stobie, who has experience with such Kaffir and Zulu children, that he has never seen caries 'in their deciduous teeth, but only in their permanent teeth, and notably in the first permanent 'molars.'" (p. 12 "Preliminary Investigation of the Influence of Raw Milk on Teeth and

Lymphoid Tissue" reprinted from the 'Proceedings of the Royal Society of Medicine,' March, 1932, Vol. XXV (Section of Odontology pp. 11-24) ). If this view is correct it is possible to have immune and susceptible teeth present in the same mouth at the same time, the immunity depending on structural perfection. The primitive races referred to in the two quotations build up an immunity in their deciduous dentitions by breast-feeding until past the time of eruption of the last teeth of that dentition, that is to say of the second deciduous molars. **Sir Frank Colyer** in "Dental Surgery and Pathology" gives the date of eruption of these teeth as the twentieth to the thirtieth month. As breast-feeding in this country is seldom if ever carried on till anything like the thirtieth month, it would be impracticable to look for such cases to test the validity of the hypothesis. Likewise except in institutions and a few selected private homes is it impossible to be certain, even when it is so claimed, that milk has been supplied raw to a child except in the case of breast milk. This line of approach then, when examining children under ordinary home conditions in industrial areas is also hardly practicable. It did seem to me however, that this immunity being an attribute of the individual tooth and complete immunity for the whole deciduous dentition being postulated when **suitable** breast-feeding was carried out past the date of eruption of the last tooth of that dentition, that it would be reasonable to suppose that if there were any teeth in the dentition whose period of growth and eruption were covered by the period of breast-feeding usual in this country those teeth should show a greater degree of immunity to decay than teeth erupted later, or than the same teeth of artificially fed children. To turn again to the dates of eruption given by **Sir Frank Colyer** we find that the mandibular central incisors erupt from the fifth to the eighth month, and the maxillary central and lateral incisors from the seventh to the tenth month. The lower incisors, however, whether it be due to their shape, the cleansing action of the lips, tongue or submaxillary salivary glands or whatever the cause seldom decay, but the upper central incisors do decay. An investigation I undertook in 1928 showed that in 450 children (394 aged 4 years and 56 aged 3 years) 55.4% of the upper central incisors were carious, this being the tooth of the deciduous dentition most frequently attacked at that age, the lower second deciduous molar being next with 53.4% carious. It is therefore clear that the upper deciduous central incisor does not possess any individual immunity to caries greater than other teeth, the reverse actually seeming to be the case. It was still possible however, that this tooth in breast-fed children would show an immunity or partial immunity greater than the same tooth in bottle-fed children. A questionnaire form was therefore devised on which the condition of the two upper central deciduous incisors was recorded and the parents were asked to state the age of eruption of these teeth, the age the child began to walk, whether the child was breast-fed, if so, the age of weaning and any notes on the health of the mother during the later months of pregnancy. The condition of the teeth was recorded as C0 C0 where both incisors were free from decay, C1 C1 where both were slightly decayed, C2 C2 where both were rather more decayed and C3 C3 where the decay was extensive, the teeth sometimes being reduced to roots. Where the decay was not symmetrical, such recordings as C0 C1, C1 C2 and C2 C3 were made, but the asymmetrical groups are small compared with the symmetrical ones. We therefore have seven groups showing from 0 to 6 points of caries. 405 such questionnaires were received completed in time for inclusion in the tabulations below.

TABLE 1.

Condition of teeth	Total	Percentage breast-fed	Breast-fed			Bottle-fed		
			No.	Average age breast-fed continued	Average age teeth cut	Average age child walked	No.	Average age teeth cut
				months	months	months		Average age child walked
C0 C0	132	55%	73	11	7	12	59	8
C0 C1	36	78%	28	11	7	12	8	7
C1 C1	90	69%	61	11	8	12	29	8
C1 C2	25	68%	17	10	8	10	8	7
C2 C2	69	62%	43	13	8	12	26	8
C2 C3	15	60%	9	13	10	11	6	8
C3 C3	38	50%	19	11	7	13	19	8
Totals ...	405	62%	250	11	8	12	155	8

TABLE 2.

PERCENTAGES OF MOTHERS DESCRIBING THEMSELVES AS UNWELL DURING THE LATER MONTHS OF PREGNANCY.

Group	Total Percentage unwell	Percentage breast-fed unwell	Percentage bottle-fed unwell
C0 C0	21%	14%	31%
C1 C0	22%	21%	25%
C1 C1	22%	21%	24%
C1 C2	24%	18%	37%
C2 C2	24%	19%	34%
C2 C3	26%	22%	33%
C3 C3	11%	11%	11%
Totals ...	21%	18%	28%



TABLE 3.  
RECORD OF CASES OF ABNORMALLY LONG BREAST-FEEDING.

Group		Breast-fed 15-17 months	Breast-fed 18 months or more	Percentage of total	Percentage of breast-fed
C0	C0	4	1	3.8%	7%
C0	C1	0	1	2.8%	3.6%
C1	C1	4	2	6.7%	9.8%
C1	C2	0	0	0%	0%
C2	C2	5	2	10.2%	16.3%
C2	C3	2	0	15.3%	22.2%
C3	C3	0	2	5.3%	10.5%
Total ...		15	8	5.7%	9.2%

Table 1 shows that on the average the age of eruption of the upper deciduous central incisors was well covered by the period of breast-feeding and that with the exception of the group C0 C0 the other groups showing a decreasing percentage of breast-feeding as the degree of caries increases, but that only one, the C3 C3 group shows a lower percentage of breast-fed children than the C0 C0 group which with 55% breast-fed is well below the average percentage breast-fed which works out at 62%.

Table 2 showing the number of mothers reporting themselves unwell during the later months of pregnancy shows a remarkable degree of consistency throughout the groups.

Table 3 also shows that we do not find a greater number of children breast-fed for an abnormally long period in the good groups than in the bad groups, in fact rather the opposite is the case here.

Finally, of the children breast-fed, only 29% had the upper deciduous central incisors free from caries compared with 38.1% of the bottle-fed children.

As an adjunct to this investigation I also noted a number of cases in which no teeth at all were carious or where there was no more decay than mere discoloured fissures.

Condition of mouth	Total	Percentage breast- fed	Breast-fed				Bottle-fed		
			No.	Average age of breast- feeding	Average age teeth cut	Average age child walked	No.	Average age teeth cut	Average age child walked
				months	months	months		months	months
No. teeth carious	28	61%	17	12	7	12	11	9	13
Discoloured fissures only	11	36%	4	11	6	12	7	9	13

Here again we find that neither of these groups show a percentage higher than the general average of breast-feeding shown in this investigation.

In his "Preliminary Investigation of the Influence of Raw Milk on Teeth and Lymphoid Tissue" afore-mentioned, **Mr. Sprawson** makes out a very strong case for an absolute immunity produced by the consumption of a daily ration of raw cows' milk. Can the figures shown above indicate that breast milk in civilised countries is lacking in some way that cows' milk is not, or that the breast milk of primitive man also is not? This of course does not seem very likely but it is not impossible as it is known that breast-fed babies may and frequently do suffer from a nutritional anaemia. It would however seem safer to conclude that environmental factors play a considerable part in producing freedom from decay or otherwise.

## 23.—Miscellaneous.

### CLINICAL PATHOLOGY.

The following specimens were taken by the school medical staff and submitted to the County Laboratory for examination:—

Throat Swabs	...	...	...	...	...	...	...	262
Hairs and Scales for Ringworm	...	...	...	...	...	...	...	19
Miscellaneous Specimens	...	...	...	...	...	...	...	35
								316

SPECIAL EXAMINATIONS WERE MADE DURING THE YEAR, AS FOLLOWS:—

(a) Cases examined under the Mental Deficiency Act (1913) and the Education Act (1921)	...	...	...	...	...	...	...	1,117
(b) School Absentees	...	...	...	...	...	...	...	225
(c) Teachers, Caretakers, Candidates and others	...	...	...	...	...	...	...	465
(d) Children Examined under the Employment of Children Acts	...	...	...	...	...	...	...	880
(e) Children examined for Licences for Entertainment	...	...	...	...	...	...	...	10
								<hr/> 2,697



Medical Certificates were submitted to the School Medical Officer for scrutiny in respect of 83 applicants for admission to Bingley Training College.

BINGLEY TRAINING COLLEGE.

Special visits were made to the College in May by **Dr. Nora M. Allan**, to examine 88 Students who were about to complete their second year of training.

The candidates, after examination, were placed in the following classes:—A1, 54; A2, 33; B1, 1.

In addition, 4 uncertificated teachers were examined.

In September, **Dr. Allan** again went to the College and 78 newly admitted students were examined. These were classified as follows :—A1, 50; A2, 26; B1, 2.

In concluding I must pay a special tribute to **Dr. Lawrence** for his work in connection with the preparation of the greater part of the subject matter of this Report.

T. N. V. POTTS,

*School Medical Officer.*

COUNTY HALL. WAKEFIELD.  
*April, 1935.*

West Riding County Council. Medical Inspection Department.

TABLE I.  
Return of Medical Inspections (Elementary).

A. ROUTINE MEDICAL INSPECTIONS.									
Entrants	...	...	...	...	...	...	...	...	17,394
Intermediates	...	...	...	...	...	...	...	...	20,157
Leavers	...	...	...	...	...	...	...	...	17,693
Total									55,244
B. OTHER INSPECTIONS.									
Number of Special Inspections	...	...	...	...	...	...	...	...	11,149
Number of Re-inspections	...	...	...	...	...	...	...	...	19,088
Total									30,237

TABLE I. (a).  
Return of Medical Inspections (Secondary).

A. ROUTINE MEDICAL INSPECTIONS.									
Entrants	...	...	...	...	...	...	...	...	4,171
Age Group 15	...	...	...	...	...	...	...	...	1,956
Total									6,127
B. OTHER INSPECTIONS.									
Number of Special Inspections	...	...	...	...	...	...	...	...	634
Number of Re-inspections	...	...	...	...	...	...	...	...	1,039
Total									1,673

TABLE II. (A)

Return of defects found in the course of Medical Inspection of Elementary School Children in 1934.

DEFECT OR DISEASE.								Routine Inspections.		Specials.	
								Number referred for treatment.	Number requiring to be kept under observ-ation, but not referred for treatment.	Number referred for treatment.	Number requiring to be kept under observ-ation, but not referred for treatment.
Malnutrition								2,485	2,684	2,041	2,372
Uncleanliness (see Table IV, Group V)								—	—	—	—
Skin	Head							41	4	24	4
	Body							28	1	14	—
	Scabies							62	3	30	2
	Impetigo							235	8	102	1
	Other Diseases (Non-Tubercular)							616	148	124	30
Eyes	Blepharitis							650	37	229	17
	Conjunctivitis							99	2	37	—
	Keratitis							—	2	1	—
	Corneal Ulcer							8	1	6	2
	Corneal Opacities							44	43	31	27
Ears	Defective Vision							4,365	1,837	2,970	755
	Squint							683	226	221	52
	Other Conditions							116	50	44	17
	Defective Hearing							231	181	92	57
	Otitis Media							394	46	146	31
Nose and Throat.	Other Ear Diseases							190	42	57	9
	Enlarged Tonsils							1,500	5,164	455	662
	Adenoids							334	386	119	119
	Enlarged Tonsils and Adenoids							809	362	406	77
	Other Conditions							481	219	99	63
Enlarged Cervical Glands (Non-Tubercular)								200	2,329	32	125
Defective Speech								105	153	26	53
Defective Teeth (See Table IV, Group IV)								—	—	—	—
Heart and Circulation	Heart Organic							177	309	65	132
	Disease Functional							107	309	20	68
	Anæmia							1,217	306	449	102
Lungs	Bronchitis							812	333	57	16
	Other Non-Tubercular Diseases							60	427	22	25
Tuberculosis	Pulmonary Definite							17	10	6	—
	Suspected							70	71	30	13
	Glands							45	74	17	22
	Spine							2	1	—	1
	Non-Pulmonary Hip							—	4	1	2
	Other Bones and Joints							3	7	2	6
	Skin							7	3	1	1
	Other Forms							8	9	5	3
Nervous System	Epilepsy							11	34	6	10
	Chorea							40	54	25	21
	Other Conditions							66	292	38	158
Deformities	Rickets							305	202	31	11
	Spinal Curvature							141	322	27	113
	Other Forms							215	233	58	43
Other Defects and Diseases								1,165	2,065	461	774

B.—Number of individual Children found at Routine Medical Inspection to Require Treatment (excluding Uncleanliness and Dental Diseases.)

Group.								Number of Children.		Percentage of Children found to require treatment.
								Inspected.	Found to require treat-ment.	
Code Groups—										
Entrants								17,394	4,328	24·88
Intermediates								20,157	6,147	30·50
Leavers								17,693	4,747	26·84
Total (code groups)								55,244	15,222	27·55
Other routine inspections								—	—	—

TABLE II. (Secondary).

A.—Return of Defects found by Medical Inspection in the Year ended 31st December, 1934.

DEFECT OR DISEASE.									Routine Inspections.		Specials.	
									Number referred for treatment.	No. requiring to be kept under observation, but not referred for treatment.	Number referred for treatment.	No. requiring to be kept under observation, but not referred for treatment.
Malnutrition	...	...	...	...	...	...	...	...	69	175	7	3
Uncleanliness	...	...	...	...	...	...	...	...	93	23	13	6
Skin	Ringworm	Head	...	...	...	...	...	...	1	—	—	—
			Body	...	...	...	...	...	—	—	—	—
	Scabies	...	...	...	...	...	...	...	2	—	2	—
	Impetigo	...	...	...	...	...	...	...	7	1	—	—
	Other Diseases (Non-Tubercular)	...	...	...	...	...	...	...	93	27	7	1
Eyes	Blepharitis	...	...	...	...	...	...	...	52	5	8	3
	Conjunctivitis	...	...	...	...	...	...	...	3	—	2	1
	Keratitis	...	...	...	...	...	...	...	—	—	1	—
	Corneal Ulcer	...	...	...	...	...	...	...	—	—	—	—
	Corneal Opacities	...	...	...	...	...	...	...	—	6	—	4
Ears	Defective Vision	...	...	...	...	...	...	...	612	416	154	90
	Squint	...	...	...	...	...	...	...	26	24	1	1
	Other Conditions	...	...	...	...	...	...	...	10	4	4	—
	Defective Hearing	...	...	...	...	...	...	...	10	11	3	2
	Otitis Media	...	...	...	...	...	...	...	16	6	—	1
Nose and Throat.	Other Ear Diseases	...	...	...	...	...	...	...	19	—	2	1
	Enlarged Tonsils	...	...	...	...	...	...	...	93	276	9	22
	Adenoids	...	...	...	...	...	...	...	18	21	4	5
	Enlarged Tonsils and Adenoids	...	...	...	...	...	...	...	29	7	8	1
	Other Conditions	...	...	...	...	...	...	...	42	9	5	3
Enlarged Cervical Glands (Non-Tubercular)	Defective Speech	...	...	...	...	...	...	...	25	65	5	2
	Defective Teeth	...	...	...	...	...	...	...	12	18	2	1
	Heart and Circulation	...	...	...	...	...	...	...	1,386	637	55	7
	Heart Disease	Organic	...	...	...	...	...	...	14	33	26	23
		Functional	...	...	...	...	...	...	11	42	8	8
Lungs	Anæmia	...	...	...	...	...	...	...	153	26	30	2
	Bronchitis	...	...	...	...	...	...	...	15	16	—	—
	Other Non-Tubercular Diseases	...	...	...	...	...	...	...	9	12	1	4
	Pulmonary	Definite	...	...	...	...	...	...	—	1	—	2
		Suspected	...	...	...	...	...	...	1	4	2	1
Tuberculosis	Non-Pulmonary	Glands	...	...	...	...	...	...	—	6	—	2
		Spine	...	...	...	...	...	...	—	6	1	—
		Hip	...	...	...	...	...	...	—	—	—	—
		Other Bones and Joints	...	...	...	...	...	...	1	—	—	—
		Skin	...	...	...	...	...	...	1	1	—	1
Nervous System	Other Forms	...	...	...	...	...	...	...	—	1	—	1
	Epilepsy	...	...	...	...	...	...	...	1	—	—	—
	Chorea	...	...	...	...	...	...	...	3	5	—	1
	Other Conditions	...	...	...	...	...	...	...	7	28	6	7
	Rickets	...	...	...	...	...	...	...	8	5	1	—
Deformities	Spinal Curvature	...	...	...	...	...	...	...	35	60	6	10
	Other Forms	...	...	...	...	...	...	...	156	121	16	17
Other Defects and Diseases									106	146	49	15

B.—Number of individual Children found at Routine Medical Inspection to Require Treatment (excluding Uncleanliness and Dental Diseases.)

Group.									Number of Children.		Percentage of children found to require treatment.
									Inspected.	Found to require treatment.	
Code Groups—											
Entrants									4,171	865	20.74
Age-group 15									1,956	536	27.40
Total (code groups)									6,127	1,401	22.86
Other routine inspections									—	—	



TABLE III.

Return of all Exceptional Children in the West Riding,  
31st December, 1934.

CHILDREN SUFFERING FROM MULTIPLE DEFECTS	49
BLIND CHILDREN	
At Certified Schools for the Blind	42
At Public Elementary Schools	5
At Other Institutions	—
At no School or Institution	5
	52
PARTIALLY BLIND CHILDREN	
At Certified Schools for the Blind	2
At Certified Schools for the Partially Blind	33
At Public Elementary Schools	58
At Other Institutions	—
At no School or Institution	8
	101
DEAF CHILDREN	
At Certified Schools for the Deaf	112
At Public Elementary Schools	8
At other Institutions	—
At no School or Institution	14
	134
PARTIALLY DEAF CHILDREN	
At Certified Schools for the Deaf	18
At Certified Schools for the Partially Deaf	—
At Public Elementary Schools	7
At other Institutions	—
At no School or Institution	2
	27
MENTALLY DEFECTIVE CHILDREN	
(Feeble-minded Children)	
At Certified Schools for Mentally Defective Children	22
At Public Elementary Schools	319
At Other Institutions	4
At no School or Institution	270
	615
EPILEPTIC CHILDREN	
(Children suffering from Severe Epilepsy)	
At Certified Special Schools	8
At Public Elementary Schools	17
At other Institutions	2
At no School or Institution	35
	62
PHYSICALLY DEFECTIVE CHILDREN	
(Children Suffering from Pulmonary Tuberculosis—including Pleura and Intra-Thoracic Glands)	
At Certified Special Schools	5
At Public Elementary Schools	588
At other Institutions	87
At no School or Institution	83
	763
(Children suffering from Non-Pulmonary Tuberculosis)	
At Certified Special Schools	8
At Public Elementary Schools	858
At other Institutions	152
At no School or Institution	118
	1,136
DELICATE CHILDREN	
At Certified Special Schools	128
At Public Elementary Schools	1,741
At other Institutions	—
At no School or Institution	267
	2,136
CRIPPLED CHILDREN	
At Certified Special Schools	93
At Public Elementary Schools	96
At other Institutions	2
At no School or Institution	87
	278
CHILDREN WITH HEART DISEASE	
At Certified Special Schools	14
At Public Elementary Schools	14
At other Institutions	—
At no School or Institution	51
	79

TABLE IV.

Return of Defects Treated during the year ended 31st December, 1934.

## TREATMENT TABLE.

## Group I.—Minor Ailments (excluding Uncleanliness).

Disease or Defect. (1)	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme. (2)	Otherwise. (3)	Total. (4)
<b>Skin.</b>			
Ringworm—Scalp ... ..	394	35	429
Ringworm—Body ... ..	326	9	335
Scabies ... ..	457	63	520
Impetigo ... ..	6,851	139	6,990
Other skin diseases ... ..	2,885	97	2,982
<b>Minor Eye Defects</b> ... .. (External and other, but excluding cases falling in Group II).	2,990	257	3,247
<b>Minor Ear Defects</b> ... ..	2,910	122	3,032
<b>Miscellaneous</b> ... .. (e.g., minor injuries, bruises, sores, chilblains, etc.).	31,130	423	31,553
<b>TOTAL</b> ...	47,943	1,145	49,088

## Group II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I).

## Number of Defects dealt with.

Defect or Disease. (1)	Number of Defects dealt with.			
	Under the Authority's Scheme. (2)	Submitted to refraction by private practitioner or at hospital, apart from the Authority's Scheme. (3)	Otherwise. (4)	Total. (5)
<b>Errors of Refraction (including Squint)</b> (Operations for Squint should be recorded separately in the body of the Report) ...	8,366	570	—	8,936
<b>Other Defect or Disease of the eyes</b> (excluding those recorded in Group I) ... ..	—	—	—	—
	8,366	570	—	8,936

Total number of children for whom spectacles were prescribed:—

(a) Under the Authority's Scheme ... ..	6,348
(b) Otherwise ... ..	570

Total Number of children who received spectacles:—

Under the Authority's Scheme ... ..	4,759
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### Group III.—Treatment of Defects of Nose and Throat. Number of Defects.

Received Operative Treatment.												Received other forms of Treatment.	Total number treated.
Under the Authority's Scheme, in Clinic or Hospital (see note b). (1)				By Private Practitioner or Hospital, apart from the Authority's Scheme. (2)				Total (3)					
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)		
1021	143	275	—	194	45	508	150	1215	188	783	150	—	2336

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and adenoids. (iv) Other defects of the nose and throat.

### Group IV.—Dental Defects.

- (1) Number of children who were:—  
(a) Inspected by the Dentists—

Routine Age Groups ...	5	...	6,008	Total	...	61,911
	6	...	9,331			
	7	...	10,059			
	8	...	9,618			
	9	...	7,731			
	10	...	5,721			
	11	...	4,981			
	12	...	4,171			
	13	...	3,658			
	14	...	633			
Specials	...	...	...	...	...	1,588
Grand Total	...	...	...	...	...	63,499
(b) Found to require treatment	...	...	...	...	...	48,417
(c) Actually treated	...	...	...	...	...	25,823
(d) Re-treated during the year as the result of periodical examination	...	...	...	...	...	8,729
(2) Half-days devoted to—						
Inspection	...	...	...	...	...	779
Treatment	...	...	...	...	...	4,025
Total	...	...	...	...	...	4,804
(3) Attendances made by children for treatment	...	...	...	...	...	32,464
(4) Fillings—						
Permanent teeth	...	...	...	...	...	16,638
Temporary teeth	...	...	...	...	...	2,713
Total	...	...	...	...	...	19,351
(5) Extractions—						
Permanent teeth	...	...	...	...	...	12,625
Temporary teeth	...	...	...	...	...	62,544
Total	...	...	...	...	...	75,169
(6) Administrations of general anæsthetics for extractions	...	...	...	...	...	—
(7) Other operations						
Permanent teeth	...	...	...	...	...	4,582
Temporary teeth	...	...	...	...	...	799
Total	...	...	...	...	...	5,381

### Group V.—Uncleanliness and Verminous Conditions.

- (1) Average number of visits per School made during the year by the School Nurses ... 9.9
- (2) Total number of examinations of children in the Schools by School Nurses ... 455,297
- (3) Number of individual children found unclean ... 2,956
- (4) Number of children cleansed under arrangements made by the Local Education Authority ... 202
- (5) Number of cases in which legal proceedings were taken—
- (a) Under the Education Act, 1921 ... —
- (b) Under School Attendance Bye-laws ... —